INSTITUTE OF GOVERNMENTAL STUDIES LIBRARY

APR 3 0 1993

UNIVERSITY OF CALIFORNIA

General Plan



City of Solana Beach



Kunzman Associates Castaneda & Associates Mestre Greve Associates Natleson Levander Whitney, Inc.

AS AMENDED THROUGH JANUARY 19, 1993



Introduction



City of Solana Beach General Plan Program

Phillips Brandt Reddick

Digitized by the Internet Archive in 2025 with funding from State of California and California State Library

CITIZENS ADVISORY COMMITTEE FOR GENERAL PLAN

Roger Boyd, Community Design Element Chairperson
Tom Campbell

Margaret Chivers, Area 7 Chairperson Ken Gross, Area 1 Chairperson

R.W. Lucker

Bob Lundborg, Conservation, Open Space, Safety Element Chairperson Bob Mancuso, Area 3 Chairperson

Chuck Murphy

Joe Olson

Jack Peek, General Plan Advisory/General Plan Reports Chairperson
Ann Pogue, Local Coastal Plan Element Chairperson
Peggy Potter, Housing Element Chairperson
Frank Renteria

Norma Ruhm, Area 6 Chairperson Allen Ryan, Noise Element, Chairperson Veronica Seay, Area 4 Chairperson Ellen Stephenson, Area 5 Chairperson

Bill Stone

Frank Tharp, Circulation Element, Chairperson
Pat Vollman
Sjirk Zijlstra, Area 2 Chairperson



TABLE OF CONTENTS

			Page Number
1.0	THE CI	TY OF SOLANA BEACH - AN OVERVIEW	1
2.0	PURPOS	SE OF THE GENERAL PLAN	2
3.0	LEGAL	AUTHORITY AND REQUIREMENTS	2
	3.1	Government Code Sections	2
	3.2	Mandated Elements	4
	3.3	Optional Elements	4
	3.4	Internal Consistency	5
	3.5	Relationship to Other Planning Documents	5
	3.6	Environmental Assessment	8
4.0	THE GE	8	
	4.1	Preparation Process	8
	4.2	General Plan Implementation	9
	4.3	General Plan Amendment Procedures	10

INTRODUCTION

1.0 CITY OF SOLANA BEACH - AN OVERVIEW

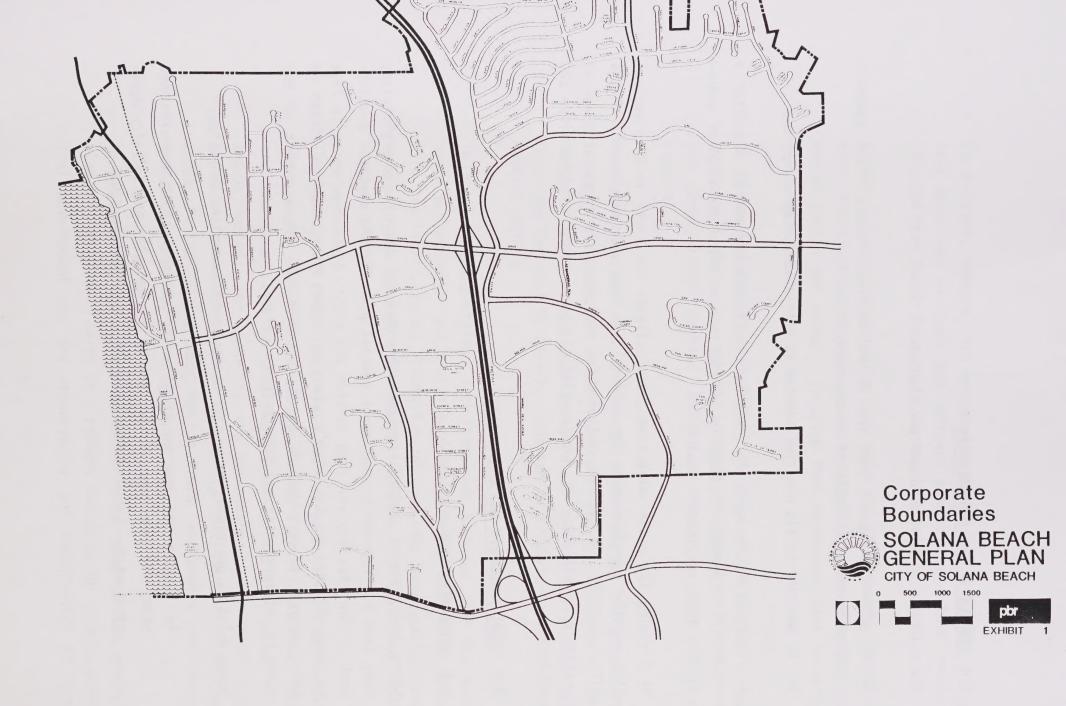
Solana Beach is a small city located in southern California on the central coast of San Diego County. It overlooks the Pacific Ocean to the west from sloping green hills and sandstone bluffs. It is bounded on the north by the San Elijo Lagoon and the city of Encinitas. To the east lies the San Dieguito County Park, rural residences and the San Dieguito River Valley. The cities of San Diego and Del Mar form the southern boundary.

The majority of the citizens are year-round residents. There are churches and synagogues of many denominations, public and private schools and numerous recreational facilities. The city is approximately 95 percent developed and is undergoing reconstruction in a few areas.

In 1986, the citizens of Solana Beach voted to incorporate as a city to preserve a way of life and self determine goals for the future. Subsequent to being incorporated, a group of citizens were designated by the City Council to initiate the process for preparing the state-mandated general plan for the city.

More than eighty dedicated individuals from all walks of life were organized into a cohesive, active group called the "Citizens Advisory Committee." They divided the city into seven areas for purposes of defining and evaluating land use, both existing and future. In addition, they formed committees to establish guidelines for each of the eight general plan elements. The end product is this document.

This general plan evaluates, defines, and sets goals for development preservation and rehabilitation of distinct neighborhoods and commercial areas. Furthermore, it is the spirit and intent of this plan to achieve and sustain a high quality of life for citizens and visitors alike through harmonious integration of pedestrians and vehicles, social and civic activities, recreational and economic opportunities and by the preservation of the city's natural beauty, now and in the future.



2.0 PURPOSE OF THE GENERAL PLAN

The major purposes of this general plan are:

- 1. To articulate goals for the future physical, social, and economic development of the city of Solana Beach;
- 2. To describe public policies adopted to attain community goals; and
- 3. To provide the basis for informed decisionmaking and to establish a basis for subsequent planning efforts such as the preparation of specific plans and special studies.

As a whole, the goals, objectives, and policies set forth in this general plan provide the framework for guiding the long-term development of the city. Section 4.2 of this Introduction discusses the range of measures available to the city for implementing its adopted goals, objectives, and policies.

3.0 LEGAL AUTHORITY AND REQUIREMENTS

3.1 GOVERNMENT CODE SECTIONS

State Law (Section 65300) requires each city to adopt a comprehensive, long term and internally consistent general plan for the physical development of the city and any land outside the city's boundaries which is felt to bear relation to the city's planning. The state requires cities to adopt general plans based on the belief that the future growth of the state is determined largely through local actions.

State policies pertaining to general plans can be summarized as follows:

. To improve the quality of life in California by preserving and using the resources of the land in economically and socially desirable ways. (Adapted from Government Code Section 65030.)

- To maintain, improve, and enhance the quality of air, water, and land according to state and national standards and local needs. (Adapted from Public Resources Code Sections 21000 et seq.)
- To ensure the preservation of open space for scenic beauty, recreation, the conservation of natural resources, and the protection of public health and safety. (Adapted from Government Code Sections 65560 and 65561.)
- To ensure the provision of "decent housing and a suitable living environment for every California family." (Adapted from Health and Safety Code Section 37112 and Government Code Section 65580(a).)
- To conserve water, air, and energy by considering the effect of future development on these resources and by encouraging new development which uses public facilities currently available and minimizes the need to travel. (Adapted from Public Resources Code Section 21001.)
- To provide transportation facilities and services that are adequate and efficient and that significantly reduce hazards to human life, pollution, noise, disruption of community organization, and damage to the natural environment. (Adapted from Government Code Section 14000.)
- To identify and reduce hazards to health and property from natural and man-made conditions, including floods, fires, landslides, soil erosion, seismic activity, airplane crashes, excessive noise, hazardous wastes, and congested and unsanitary living conditions. (Adapted from Water Section Code 8401, Government Code Section 26215, Public Utility Code Section 21670, and Health and Safety Code Sections 25101, 33071, and 37121.)
- To use reasonable and practical means in carrying out the general plan so that it will serve as a pattern and guide for orderly physical development and the preservation and conservation of open

space land and as a basis for the efficient expenditure of public funds. (Adapted from Government Code Section 65400(a).)

To ensure that land use decisions are made with full knowledge of the long- and short-term economic and fiscal implications, as well as environmental effects. (Adapted from Government Code Section 65030.2.)

3.2 MANDATED ELEMENTS

Government Code Section 65302 specifies that every city and county shall include the following seven elements in its general plan:

- . Land Use Element
- . Circulation Element
- Housing Element
- . Conservation Element
- . Open Space Element
- . Noise Element
- Safety Element

Although these elements are mandatory, they may be combined at the discretion of the city as long as the city complies with all requirements governing the content and adoption of mandatory elements.

3.3 OPTIONAL ELEMENTS

Government Code Section 65303 states that local governments may adopt "any other elements or address any other subjects which...relate to the physical development of the...city."

The city of Solana Beach has determined that an Economic Development Element, which is an optional element, is appropriate for inclusion in this general plan. It should be noted that optional elements have the same force and effect as required elements.

3.4 INTERNAL CONSISTENCY

Since all elements of the general plan have equal status, no element may supersede another element. Therefore, as required by Government Code 65300.5, the general plan and elements and parts thereof must comprise an integrated, internally consistent, and compatible statement of policies for the adopting agency. All baseline data, goals, objectives, and policies adopted in the general plan must be consistent. Exhibit 2 provides a matrix which reflects the consistency of the elements comprising this general plan.

3.5 RELATIONSHIP TO OTHER PLANNING DOCUMENTS

To make the long-range comprehensive planning of the general plan more meaningful, a link between the general plan and day-to-day actions of the city is required. In California, the general plan has been institutional-ized through the enactment of statutes requiring consistency of certain local actions with the general plan. Additional statutes, while not mandating consistency, require findings or a report on whether proposed actions conform to the general plan. The state's general rule for consistency determination is stated as:

An action, program, or project is consistent with the general plan if it, considering all aspects, will further the objectives and policies of the general plan and not obstruct their attainment.

Following is a list of provisions in state law that require local actions and documents to be consistent with the general plan:

Zoning:

Government Code Section 65860 requires that city and county zoning ordinances be consistent with the general plan.

GENERAL PLAN ELEMENT	LAND USE DATA	POPULATION	HOUSING	EMPLOYMENT	TRAFFIC	NATURAL RESOURCE DATA	GOALS, OBJECTIVES, AND POLICIES
LAND USE	*	*	*	*	*	*	*
CIRCULATION	*	*	*	*	*		*
HOUSING	*	*	*	*	*		*
CONSERVATION AND OPEN SPACE	*					*	*
NOISE	*				*		*
SAFETY					*	*	*
ECONOMIC DEVELOPMENT	*	*	*	*			*

Designates baseline data or information presented that must be compatible among the various elements.

Internal Consistency Matrix SOLANA BEACH GENERAL PLAN CITY OF SOLANA BEACH



Subdivisions:

Government Code Sections 66473.5 and 66474 require that subdivision and parcel map approvals in all jurisdictions be consistent with the general plan.

Reservations of Land Within Subdivisions:

Government Code Section 66479 requires that reservations of land for parks, recreational facilities, fire stations, libraries, and other public uses within a subdivision conform to the general plan.

Open Space:

Government Code Section 65566 requires that acquisition, disposal, restriction, or regulation of open space land by a city or county be consistent with the open space element of the general plan.

Government Code Section 65567 prohibits the issuance of building permits, approval of subidivision maps, and adoption of open space zoning ordinances that are inconsistent with the open space element of the general plan.

Government Code Section 65910 requires that every city and county adopt open space provisions in their zoning ordinances consistent with the open space element of the general plan.

Government Code Section 51084 requires cities and counties accepting or approving an open space easement to make a finding that preservation of the open space land is consistent with the general plan.

Capital Improvements:

Government Code Sections 65401 and 65402 require the review of and report on the consistency of proposed city, county, and special district capital projects, including land acquisition and disposal, with the applicable general plan.

Development Agreements:

Government Code Section 65867.5 requires that development agreements between developers and local governments be consistent with the general plan.

Special Housing Programs:

Health and Safety Code Section 50689.5 requires that housing and housing programs developed under Health and Safety Code Sections 50680 et seq. for the developmentally disabled, mentally disordered, and physically disabled be consistent with the housing element of the general plan.

Parking Authority Projects:

Street and Highway Code Section 32503 requires that parking authorities, in planning and locating any parking facility, are "subject to the relationship of the facility to any officially adopted master plan or sections of such master plan for the development of the area in which the authority functions to the same extent as if it were a private entity."

Project Review Under CEQA:

Title 14, California Administrative Code Section 15080 requires examination of projects subject to the provisions of the California Environmental Quality Act for consistency with the general plan.

Mineral Resources:

Public Resources Code Section 2763 requires that city and county land use decisions affecting areas with minerals of regional or statewide significance be consistent with mineral resource management policies in the general plan.

Transmission Lines:

Public Utilities Code Section 12808.5 requires cities and counties approving electrical transmission and distribution lines of municipal utility districts to make a finding concerning the consistency of the lines with the general plan.

3.6 ENVIRONMENTAL ASSESSMENT

The California Environmental Quality Act (CEQA) requires that environmental issues related to the adoption of a general plan be addressed either in the general plan itself or through the preparation of an Environmental Impact Report (EIR). As defined by Section 15206 of the State CEQA Guidelines, a proposed general plan shall be considered as a project of statewide, regional, or areawide significance if it involves the preparation of an EIR and shall be subject to review by state agencies. Pursuant to CEQA, an EIR has been prepared for the Solana Beach General Plan and is provided as a companion document.

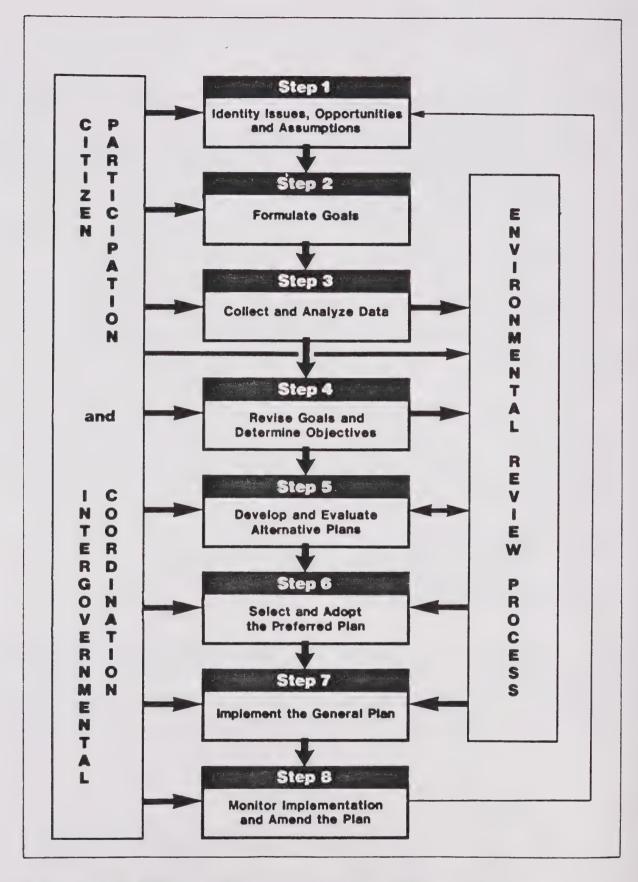
4.0 THE GENERAL PLAN PROCESS

4.1 PREPARATION PROCESS

This general plan is the product of a team effort involving the citizens of Solana Beach, the Solana Beach City Council, city staff, and a multi-disciplined team of consultants. As illustrated by Exhibit 3, the general plan process involved the following key aspects:

- 1. The identification and analysis of issues.
- The establishment of goals and objectives.
- 3. The development and evaluation of alternative land use plans.
- 4. The selection of a preferred alternative and the establishment of an implementation program.

Continuous opportunities for citizen participation were provided throughout the process. The primary arena for public involvement was an extensive series of General Plan Advisory Committee meetings and workshops.



General Plan Preparation Process





This citizen participation was essential to the identification of community values and goals which served as the foundation of the plan. Further, the General Plan Advisory Committee reviewed work in progress and provided recommendations concerning key decisions to be reached during the process.

4.2 GENERAL PLAN IMPLEMENTATION

The city of Solana Beach has several implementation measures available to carry out its adopted goals and objectives. Within the general plan itself, each element contains policies which call for specific implementing actions to be taken by the city. Other polices are set forth which call for subsequent programs and actions to be taken which will implement the provisions of the general plan.

In addition to the measures established in the general plan itself, other implementation measures are derived from the city's corporate and police powers granted by state law. The adoption of a zoning ordinance is the city's principal instrument for implementing the general plan and is derived from the police power given to the city. This ordinance regulates land use by dividing the city into zones and specifying permitted uses, allowable development intensities, minimum lot size, building height and setback limits, and other development parameters within each land use zone.

Other implementation measures derived from the city's police power include the city's power to regulate subdivisions, to adopt specific plans, to enforce building and housing codes, to establish park dedication requirements, and to utilize environmental and design review procedures when considering development proposals.

Implementation measures derived from the city's corporate powers include the construction of streets, water, and sewer facilities, the acquisition and development of parkland, the acquisition of sites for low income housing, and the acquisition of open space, conservation, or scenic easements.

4.3 GENERAL PLAN AMENDMENT PROCEDURES

In order to permit time for orderly implementation of this plan, general plan amendments which could result in an increase in the intensity or density of land uses shall not be approved during the first two years after its initial adoption. After the two-year time period, each element of the general plan shall be amended no more than once annually. The City Council shall approve general plan amendments which could result in an increase in the intensity or density of land uses only by a four-fifths* vote of all of its members. This provision shall not apply to amendments which are necessary to comply with state or federal law or which are necessary to implement or obtain certification of the local coastal program. The City Council shall, by ordinance, adopt procedures to implement this paragraph.

^{*}Resolution 93-5, adopted January 19, 1993

Land Use Element



City of Solana Beach General Plan Program

Phillips Brandt Reddick



SOLANA BEACH GENERAL PLAN LAND USE ELEMENT

CITY OF SOLANA BEACH 380 Stevens Avenue, Suite 120 Solana Beach, California 92075 (619) 755-2998

Solana Beach City Council

Margaret Schlesinger, Mayor

Jack Moore, Deputy Mayor

Marion Dodson, Council Member

Richard Hendlin, Council Member

Celine Olson, Council Member

Adopted November 14, 1988



TABLE OF CONTENTS

		Page Number
1.0	INTRODUCTION	1
	1.1 Overview	1
	1.2 Purpose	2
	1.3 Authorization	2
2.0	EXISTING CONDITIONS/ISSUE ANALYSIS	4
	2.1 Existing Land Use Conditions	4
	2.2 Land Use Issues	5
3.0	GOALS, OBJECTIVES AND POLICIES	10
4.0	THE LAND USE PLAN	17

L'AND USE ELEMENT

1.0 INTRODUCTION

1.1 OVERVIEW

1.1.1 Contents of Element

The land use element describes existing land use characteristics and development patterns in Solana Beach. This element also identifies the issues (such as locational factors and physical constraints) affecting land use planning in Solana Beach. The land use element also articulates the goals, objectives, and policies designed to facilitate Solana Beach's development pursuant to the land use plan. The land use plan (Exhibit 2) provided in this element is based upon existing land use characteristics and land use planning issues as well as the city's goals, objectives, and policies.

1.1.2 Key Issues

A primary issue affecting Solana Beach's development is the need to ensure that land development in the city provides an appropriate range of residential and non-residential uses, recognizing the importance of minimizing potential conflicts involving adjacent land uses.

Other key issues affecting Solana Beach's land use planning include physical constraints (eg., environmental limitations, and lot size and configuration), fiscal constraints limiting the provision of public services, and other constraints such as the need to maintain an appropriate balance of land use types within the city.

1.1.3 Overview of Goals, Objectives, and Policies

The goals of this element are to promote the development of a well-balanced and functional combination of separate land uses and to ensure that development in the city is consistent with the city's character and image. To achieve these goals, a complete set of objectives and policies is provided. These objectives and policies set forth specific approaches to encouraging the development of appropriate types and adequate amounts of various land uses.

1.2 PURPOSE

1.2.1 Response to Key Issues

This land use element is intended to reflect the opportunities and constraints affecting land use in Solana Beach. The overall purpose of this element is to establish a balanced pattern of land use that is consistent with the values of the community and is responsive to the opportunities and constraints identified.

1.2.2 The Land Use Plan

The land use plan established in this element sets forth the general location and general development intensities for a variety of land uses within the city. The prime consideration in establishing this land use plan is to ensure that Solana Beach is able to maintain its residential and recreational character while ensuring the continued economic health of the community.

The process of evaluating the city's strengths, weaknesses, opportunities, and constraints has resulted in the adoption of a land use plan that balances the city's need to enhance its economic vitality with the need to preserve the cultural and environmental factors contributing to the character of the city. The land use plan serves as the long-range guide for Solana Beach's future growth and development.

1.3 AUTHORIZATION

This land use element is required by state law. As specified in Government Code Section 65302(a), the general plan shall include:

A land use element which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid

waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall also identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to those areas.

2.0 EXISTING CONDITIONS/ISSUE ANALYSIS

2.1 EXISTING LAND USE AND CONDITIONS

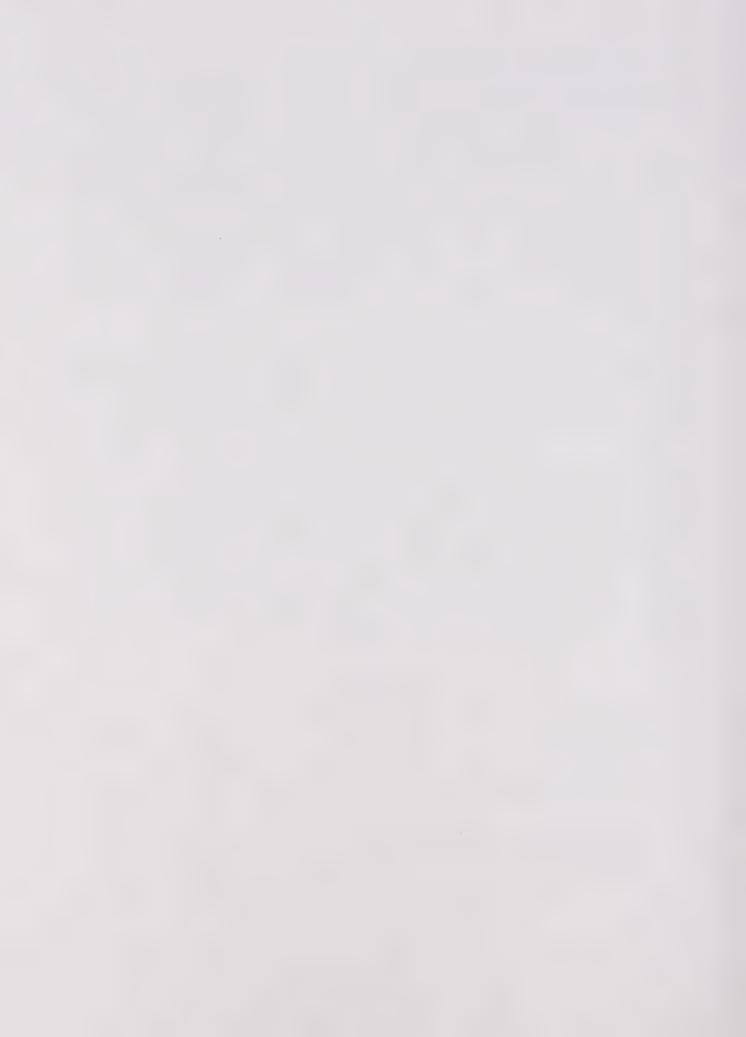
The city of Solana Beach is located on the central coast of San Diego County. To the north, the San Elijo Lagoon is partially within and adjacent to the city, beyond which is the city of Encinitas. To the east are unincorporated areas of San Diego County which include San Dieguito Regional Park and the inland communities of Rancho Santa Fe and Fairbanks Ranch. To the south, Solana Beach is bounded by the cities of San Diego and Del Mar.

The city is bisected by Interstate 5 (I-5), which provides the principal transportation link between the Los Angeles and San Diego metropolitan areas. Amtrak provides rail service through Solana Beach as it spans the distance from San Diego to Los Angeles and other northbound destinations.

As shown on Exhibit 1, existing land uses within Solana Beach are predominantly residential, which account for approximately 54 percent of Solana Beach's existing land area. There are approximately 6,245 dwelling units in Solana Beach as of 1988. Other predominant land uses include recreation/open space (approximately 12 percent) and commercial land areas which account for about 5 percent of Solana Beach's existing land area. Table 1 summarizes Solana Beach's existing land use mix.

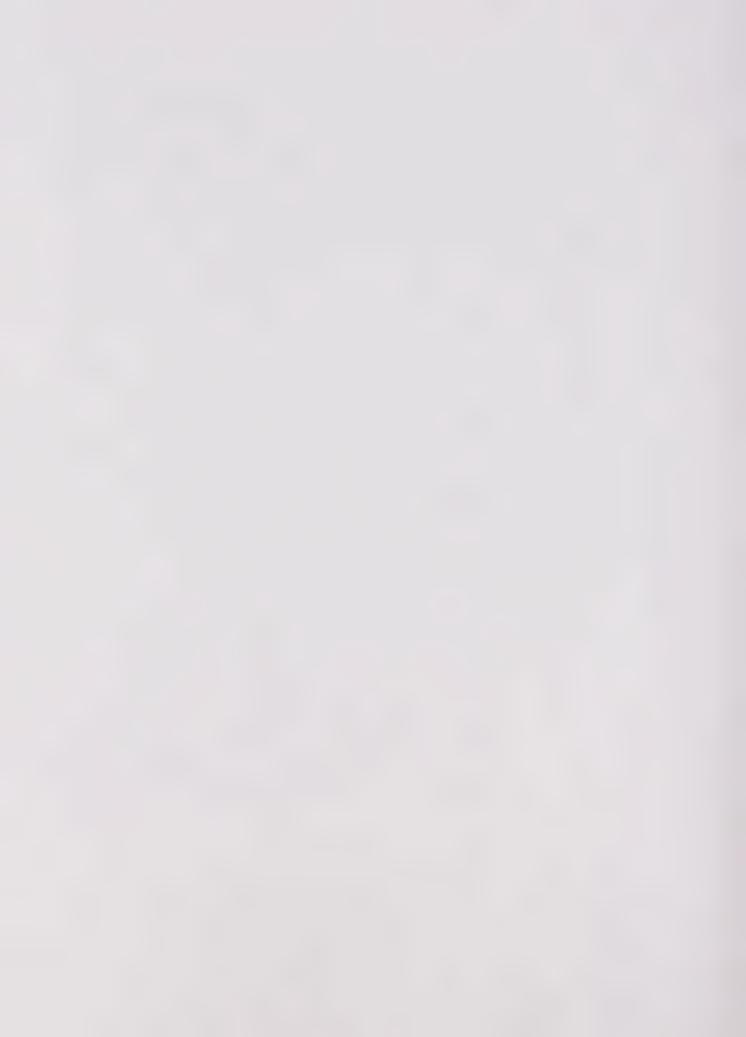
Table 1
EXISTING LAND USE MIX

Land Use		Acres	Percent
Residential		1,200.4	54
Commercial		119.2	5
Office/Professional		30.8	1
Light Industry		38.9	2
Agriculture		18.8	1
Recreation/Open Space		263.0	12
Public/Quasi-Public/Institutional		122.4	6
Vacant		13.9	1
Roads and Right-of-Way		404.1	18
	Total	2,211.5	100





pbr EXHIBIT 4



Solana Beach's predominant commercial land uses are located along Highway 101 and Lomas Santa Fe Drive and are the key focus of Solana Beach's business activity. Cedros Avenue offers a mix of commercial, office/professional, and light industrial land uses and also represents an important focus of Solana Beach's business activity. Commercial uses also exist on Stevens and Valley Avenues. Other business-related land uses such as office/professional and light industrial uses represent a minor proportion of Solana Beach's existing land use and amount to approximately three percent of Solana Beach's existing land area.

2.2 LAND USE ISSUES

2.2.1 Historical Context

Solana Beach's history dates back to the early 20th century. In 1908, George Jones acquired 220 acres on what was then known as Lockwood Mesa. This acreage was used by Jones for more than a decade to cultivate grain and lima beans. The other early activities which influenced the formation of Solana Beach were the Santa Fe Railroad operations and the development of Highway 101 prior to World War I.

In 1922, Colonel Ed Fletcher of the Santa Fe Land and Improvement Company acquired the Jones property. On March 5, 1923 Fletcher filed the original subdivision map of Solana Beach. Fletcher then proceeded to cut an opening through the bluffs so that the beach could be viewed from the townsite. Following several months of hydraulic operations, an opening to the beach was created at what is now known as the Plaza just west of the Highway 101/Lomas Santa Fe Drive intersection.

The availability of an adequate water supply from Lake Hodges enabled Fletcher and his associates to begin developing the community. About one-half of the townsite had been sold prior to the onset of the Great Depression in 1929. Following the Depression and World War II, Solana Beach and several other nearby communities continued to grow with residential and commercial development.

In the late 1960s and in response to requests from major community organizations in the San Dieguito area, 1 the county of San Diego initiated preparation of the San Dieguito General Plan. This general plan was followed by the more detailed San Dieguito Community Plan (adopted in 1974) which was intended to regulate and control growth in the area's unincorporated communities. Urban development in Solana Beach continued in the area west of I-5 generally on a parcel-by-parcel basis. Conversely, most of the area east of I-5 has been developed pursuant to the Lomas Santa Fe Master Plan. By the mid-1980s, Solana Beach had become highly urbanized with only a few remaining acres of undeveloped property.

On April 30, 1985, a committee of Solana Beach residents named "Citizens Intending to Incorporate" (CITI) filed a formal application for incorporation as the city of Solana Beach. Following approval by the county's Local Agency Formation Commission and the affirmative vote by the citizens, the city of Solana Beach was officially incorporated on July 1, 1986.

2.2.2 Land Use Compatibility Considerations

As noted previously, Solana Beach has already been developed extensively. Thus, the land use compatibility considerations affecting development in Solana Beach relate primarily to future development which involves the recycling of currently developed parcels and infill development of the city's few remaining vacant parcels.

In general, such development is expected to occur in the area west of I-5. This is primarily due to the age and mix of this area's existing development. Further, most of the area east of I-5 and north of Lomas Santa Fe Drive has been developed according to a master plan and is expected to experience very little new development activity over the next twenty years.

The San Dieguito area encompasses Solana Beach, Leucadia, Encinitas, Rancho Santa Fe, and other portions of San Diego County bounded by the Pacific Ocean to the west, Carlsbad to the north, San Marcos and Escondido to the east, and San Diego and Del Mar to the south.

The areas where future redevelopment of developed parcels and infill development are most likely to occur include areas along Highway 101, Cedros Avenue and Lomas Santa Fe Drive. A key land use compatibility issue affecting new development in these areas in particular, and throughout the city in general, is the need to minimize the potential for conflicts involving adjacent land uses. For example, the generally quiet nature of residential neighborhoods can be maintained through measures that minimize the potential for conflicts involving adjacent land uses. Such measures may involve locating commercial land uses along arterial roadways to buffer traffic noise from residential areas, and provide an adequate circulation system and sufficient parking to minimize the spillover of traffic into residential areas.

2.2.3 Physical Constraints

The city includes a variety of physical constraints affecting potential land development. For example, slope stability problems along Solana Beach's entire coastal bluff area pose a significant constraint to bluff-top development (as discussed in Section 2.2 of the safety element). Similarly, steep slopes in other areas limit the extent of potential development in hillside areas within the city.

As discussed in the open space and conservation element, the potential for new development along the northwestern edge of the city is limited by the presence of the San Elijo Lagoon and concerns involving the sensitivity of the lagoon's biological resources.

The potential for new development in other areas of the city also can be constrained by small and/or irregular parcel configurations. For example, the extent of new commercial development along Highway 101 or Cedros Avenue is contingent upon the availability of lots with adequate depth and width to accommodate proposed developments which meet municipal code requirements.

A key constraint to future development is the physical capacity of the city's traffic circulation system. It is important that the carrying capacity of Solana Beach's roadways be adequate to accommodate the traffic gen-

erated pursuant to buildout of the general plan. An inadequate circulation system can limit the city's ability to provide for a more appropriate distribution and density of land uses relative to the city's overall goals and objectives.

2.2.4 Public Service Constraints

The potential for land use intensification and new development in Solana Beach is subject to constraints imposed by the ability of public service agencies and utilities to provide adequate levels of service to such development. For example, new development can place additional demands upon the San Diego County Sheriff's Department (which provides law enforcement service under contract with the city), the Solana Beach Fire Department, the Solana Beach School District, and the San Dieguito Union High School District. Further, such developments could necessitate the extension of, or improvements to, water lines, electrical lines, natural gas lines, and possibly sewer lines from existing facilities.

It should be noted that public service agencies and utilities typically incorporate city and regional growth projections into their planning for potential service requirements. However, it is important to ensure that growth in the city does not accelerate to a degree that precludes the provision of adequate service levels due to fiscal limitations.

2.2.5 Other Constraints

A variety of other constraints could influence the nature and pace of new development in Solana Beach. A key consideration is the need to provide for a range of land uses that offer a balanced relationship between housing, employment opportunities, and recreational opportunities. Such a balance helps to ensure the stability of the community and allows for a strong and diversified economic base.

A second consideration is the need to maintain consistency between general plan and zoning designations pursuant to Government Code Section 65860. For example, areas designated for residential use in the general plan cannot be zoned and developed for commercial uses or vice-versa.

In order to permit time for orderly implementation of this plan, general plan amendments which could result in an increase in the intensity or density of land uses shall not be approved during the first two years after its initial adoption. After the two-year time period, each element of the general plan shall be amended no more than once annually. The City Council shall approve general plan amendments which could result in an increase in the intensity or density of land uses only by a four fifths* vote of all of its members. This provision shall not apply to amendments which are necessary to comply with state or federal law, or which are necessary to implement or obtain certification of the local coastal program. The City Council shall, by ordinance, adopt procedures to implement this paragraph. It should be noted that a city is permitted to amend the general plan's mandatory elements a maximum of four times per year (Government Code Section 65358(b)).

Changes in zoning must be consistent with the general plan or a general plan amendment must be approved before, or concurrently with, the proposed zone change.

^{*}Resolution 93-5, adopted January 19, 1993

3.0 GOALS, OBJECTIVES, AND POLICIES

GOAL 3.1

TO PROMOTE DEVELOPMENT OF A WELL-BALANCED AND FUNCTIONAL MIX OF RESIDEN-TIAL, COMMERCIAL, INDUSTRIAL, OPEN SPACE, RECREATIONAL, AND INSTITUTIONAL LAND USES.

Objective 1.0

Encourage the development and maintenance of healthy residential neighborhoods, the stability of transitional neighborhoods, and the rehabilitation of deteriorated neighborhoods.

<u>Policy 1.a</u> The city's land use plan shall include residential land uses comprising a range of housing types, locations, and densities.

<u>Policy 1.b</u> Pursuant to the housing element of this general plan, the city shall facilitate the construction of 174 new housing units (including twelve affordable dwelling units), and encourage the rehabilitation of ten dwelling units during the next five years.

Policy 1.c In order to protect the rental housing stock, protect purchasers of dwelling units, to assure consistency with the general plan density requirements, to protect neighborhoods by assuring adequate parking, and to assure adequate public facilities, conversion of existing apartments to condominiums or other similar forms of subdivision shall be regulated pursuant to city zoning and subdivision ordinances. The regulations shall ensure that conversion of apartments to condominiums or other similar types of subdivisions will meet current standards for the construction of new condominiums or other similar types of multi-family dwellings within the city.

Objective 2.0

Encourage the development of commercial land uses which strengthen the city's economic base and offer a range of commercial enterprises to meet the needs of residents and visitors.

- <u>Policy 2.a</u> The city's land use plan shall include an adequate amount of acreage designated for a range of commercial land uses.
- <u>Policy 2.b</u> The city's land use plan shall include an adequate amount of acreage to be used for tourist-related commercial land uses along Highway 101 (in the Plaza area).
- <u>Policy 2.c</u> Special commercial land uses along Cedros Avenue and north of Genevieve shall be developed pursuant to specific design controls established by the city to allow for limited light industrial development.
- <u>Policy 2.d</u> Redevelopment of commercial areas utilizing available methods including the community redevelopment law shall be pursued in order to provide infrastructure, land and other incentives needed to provide opportunities for commercial development.
- <u>Policy 2.e</u> The city shall formulate specific development standards for Highway 101, Cedros Avenue, and the commercial property in Eden Gardens.

Objective 3.0

Encourage the establishment of industrial land uses to diversify Solana Beach's economic base and to provide additional local employment opportunities.

- <u>Policy 3.a</u> The city's land use plan shall provide areas designated for industrial uses to be developed during the next twenty years.
- <u>Policy 3.b</u> Within areas designated as industrial, the city shall permit the establishment of light industrial facilities, research and development parks, public storage centers, warehouses, and heavy equipment storage and maintenance yards.

Objective 4.0

Promote the preservation of floriculture operations in the city.

<u>Policy 4.a</u> The city's land use plan shall allow for floriculture (or similar agriculture) operations within the city.

Objective 5.0

Provide an adequate amount of open space and recreational land uses to meet the needs of the entire community.

<u>Policy 5.a</u> The city's land use plan shall provide for open space along the city's beaches, within parks, and other appropriate locations.

<u>Policy 5.b</u> Adequate access shall be provided to public open space and recreational areas.

Objective 6.0

Provide for the development of an adequate amount of institutional land uses to meet the social, economic, cultural, spiritual, and educational needs of the community.

<u>Policy 6.a</u> The city's land use plan shall include areas designated for institutional land uses.

<u>Policy 6.b</u> Within areas designated as institutional, the city shall permit the development of publicly owned facilities and schools, churches and synagogues, hospitals and medical centers, and retirement care facilities and convalescent homes.

Objective 7.0

Ensure that the demand for public facilities and services does not exceed the city government's ability to provide said facilities and services.

<u>Policy 7.a</u> The city shall establish and maintain a development strategy relating economic growth and logical land use patterns with the provision of public services and utilities.

<u>Policy 7.b</u> The city shall periodically review and update its land use plan to ensure that a balance is maintained between employment and housing opportunities, and to ensure the availability of sufficient municipal revenues to maintain adequate levels of public services.

<u>Policy 7.c</u> The city shall develop and implement methods for ensuring that new development does not create an adverse economic impact on the city, or a need for new additional or different public facilities which have not been provided by the city.

GOAL 3.2

TO ENSURE THAT DEVELOPMENT IN THE CITY IS CONSISTENT WITH THE OVERALL COM-MUNITY CHARACTER AND CONTRIBUTES POSITIVELY TOWARDS THE CITY'S IMAGE.

Objective 1.0

Distribute land uses to establish a pattern which minimizes the potential for conflicts involving adjacent land uses.

<u>Policy 1.a</u> The city shall encourage the development of multiple-family residential land uses near to non-residential uses (eg., commercial centers, light industrial uses, etc.) and shall provide for adequate buffers where single family residential areas are already located adjacent to such non-residential uses.

<u>Policy 1.b</u> The city shall develop ordinances to encourage the preservation of private views.

Objective 2.0

Ensure that commercial development is located conveniently.

<u>Policy 2.a</u> The city's land use plan shall provide for commercial development along Cedros Avenue, Highway 101, a portion of Stevens Avenue and Valley Avenue, and in the vicinity of the I-5/Lomas Santa Fe interchange. Further, such development shall provide adequate access and parking to min-

imize the potential intrusion of commercial traffic into residential neighborhoods.

GOAL 3.3

TO ENSURE THAT LONG-TERM PROTECTION OF THE ENVIRONMENT IS GIVEN THE HIGH-EST PRIORITY IN THE CONSIDERATION OF DEVELOPMENT PROPOSALS AND IN THE IMPLEMENTATION OF THIS GENERAL PLAN.

Objective 1.0

Develop ordinances and regulations restricting land use and development on lands which have unique or sensitive environmental geographic or geologic features.

<u>Policy 1.a</u> To ensure that development does not create adverse environmental, geographic or geologic impacts, the City Council shall adopt ordinances for preservation of hillsides, scenic public views and, where feasible, private views. The Council shall also adopt ordinances regulating development of property within special hazard areas, including floodplain, coastal bluff and steep hillside areas.

<u>Policy 1.b</u> For purposes of determining residential land use intensity, the following general rules shall apply:

- I. Public rights-of-way for streets, railroad rights-of-way, and utility easements for high voltage electrical transmission lines shall be considered to be undevelopable except for appropriate street, railroad or utility uses.
- II. For the purposes of determining general plan compatibility of sub-divisions and multi-dwelling unit projects, the total number of residential dwellings which may be permitted on property shall be established by applying the following slope density guidelines: Slopes with a grade of less than 25 percent shall be considered fully developable; slopes with a grade of 25 percent to 40 percent shall be considered developable at 1/2 the density otherwise desig-

nated for the site; slopes with a grade of 40 percent or more shall be considered undevelopable; for those areas along the coastal bluff and lands adjoining the San Elijo Lagoon, slopes with a grade of greater than 25 percent shall be considered undevelopable.

III. The density established by this General Plan shall not be construed to establish a "quaranteed" or "vested" right to a specific number of dwelling units, but as a guideline for determining appropriate zoning and for making land use permit decisions consistent with environmental planning, public facilities, geologic and other sound land use planning concerns. When determining the appropriate zoning applicable to a site, the City Council shall consider the topographic, environmental, geographic and public facilities constraints applicable to the site. Whenever density is expressed in terms of a density range, zoning, subdivision, and other land use decisions establishing density for a site at a number which is greater than the lowest number established by the density range shall be justified by consideration of such matters as: superior project design; public facility availability; availability of public transportation; proximity to public recreation; provision of* public facilities or community amenities by the developer of the site; whether the increased density will assist the City in meeting its regional housing obligations and local housing goals; whether the increased density will adversely affect the neighborhood; or whether the increased density will assist the city in meeting other General Plan goals and objectives. Whenever application of the density established for a site results in a fractional dwelling unit, the City Council may allow one additional unit for projects which incorporate superior designed qualities, or which provide additional public facilties or community amenities, or assist the city in meeting the city's housing goals and for which the City Council finds that permitting the additional dwelling unit will not adversely affect the neighborhood. Whenever application of the density established for a site results in a fractional density, the decision making authority may deem a fractional density of .7 of a dwelling unit or greater to be one dwelling.

- IV. The density regulations of this general plan shall not be construed to prohibit the development or redevelopment of one single family residential dwelling on any residentially zoned lot legally existing on the date of the adoption of the general plan, provided the structure complies with the minimum requirements established for the development of single-family residential structures in the zoning ordinance other than density or lot size requirements.
- VI. State-mandated density bonus provisions such as the program outlined in Government Code Section 65915 shall be applicable to projects of less than five units.

<u>Policy 1.c</u> Except where necessary to prevent the denial of all reasonable economic use of property as determined by the City Council after hearing, grading on natural slopes with an average inclination in excess of 25 percent shall be restricted. This policy shall be used to maintain as much of the natural terrain as possible, while allowing reasonable use of property. The City Council may allow minor grading for the construction of one single family dwelling unit and driveway for up to 20 percent of a legal lot consisting entirely of slopes of 25 percent or more if other non-grading approaches to development are not feasible.

4.0 THE LAND USE PLAN

The Solana Beach land use plan has been formulated in response to the considerations discussed in Section 2.0 (eg., land use compatibility, circulation issues, physical constraints, etc.) and in response to the city's overall goals and objectives concerning land use. As shown on Exhibit 2, the city's land use plan provides for very little change to existing development patterns. The key land use changes that could occur after the adoption of this land use plan would be a 4.7 percent increase in the total number of dwelling units citywide, the intensification of commercial uses along Highway 101, and intensification and development of special commercial uses along Cedros Avenue.

Table 2 below provides a statistical summary of the land uses provided for in this land use element. The predominant land uses in the city will con-

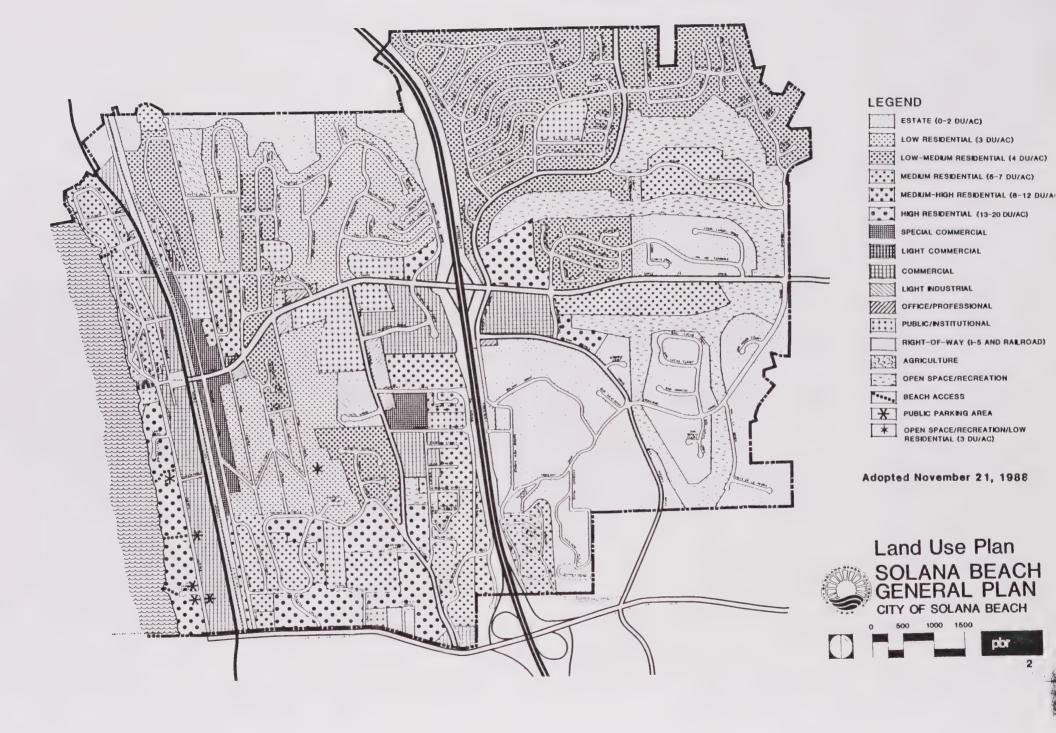
Table 2
LAND USE PLAN STATISTICAL SUMMARY

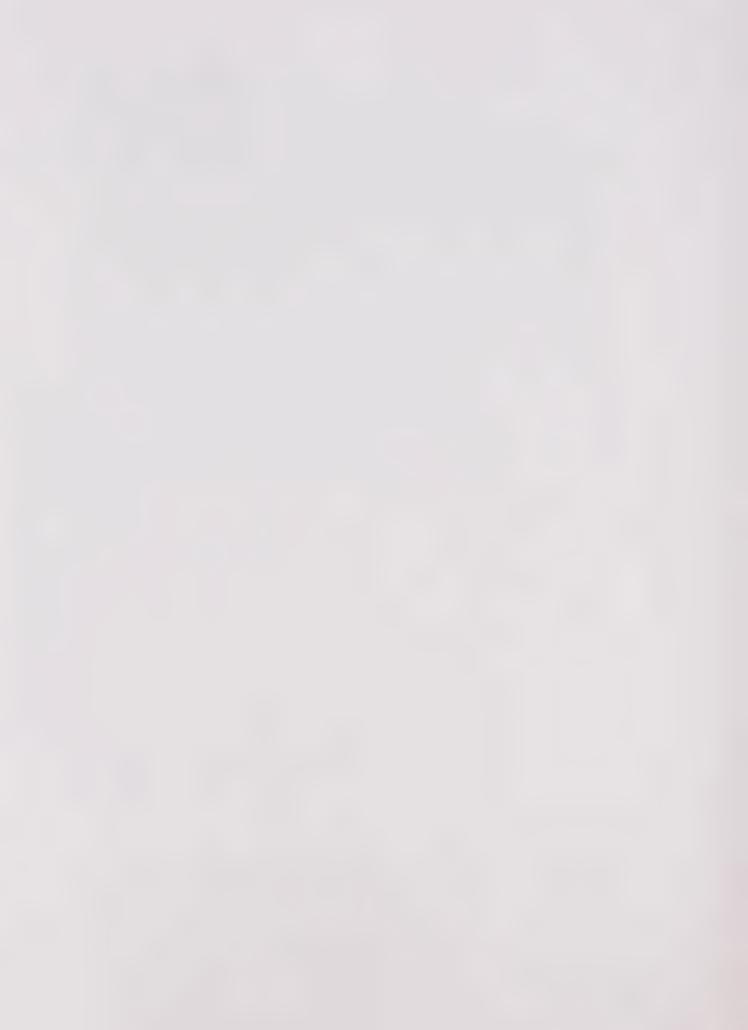
		Percen	t
Land Use	Acres	of Acrea	ge Units*
Estate Residential (0-2 DU/ac)	280.5	12.5	280
Low Residential (3 DU/ac)	253.2	11.4	760
Low/Medium Residential (4 DU/ac)	375.5	17.0	1,502
Medium Residential (5-7 DU/ac)	147.0	6.7	882
Medium-High Residential (8-12 DU/ac)	80.5	3.6	805
High Density Residential (13-20 DU/ac)	139.8	6.3	
Subtotal	1,276.5	57.7	6,536
General Commercial (11,000 sf/ac)**	114.8	5.2	1,262,360
Light Commercial (11,000 sf/ac)	1.9	.1	20,900
Special Commercial (15,000 sf/ac)	33.7	1.5	
Office/Professional (20,000 sf/ac)	22.4	1.0	•
Light Industrial (19,000 sf/ac)	13.1	.6	248,900
Public/Institutional (20,000 sf/ac)	79.3 12.8	3.6 .6	1,586,000 N/A
Agriculture			
Open Space/Recreation	231.1	10.4	N/A
Right-of-Way (I-5 and railroad)	88.5	4.0	N/A
Subtotal	1,874.1	84.7	4,071,660
Roads	337.4	15.3	N/A
TOTAL	2,211.5	100.0	N/A

^{*} Midpoint of density range used for calculating residential units.

^{**} Square feet per acre factors represent prototypical figures for purposes of projecting likely square footages at buildout of the general plan.







tinue to be residential uses (58 percent of total area), open space and recreation areas (10 percent), and commercial uses (7 percent). This does not represent a major departure from relative proportions of existing land uses.

As noted previously, Government Code Section 65860 requires zoning ordinances to be consistent with the general plan. Table 3 shows the relationship between Solana Beach's zoning districts and the general plan land use designations. The individual general plan land use categories are described below.

Estate Residential - This category involves estate types of residences developed at a maximum density of two dwelling units per acre. Assuming an average household size of 2.6 persons per unit, the population density for this category would be approximately six persons per acre. All of the city's estate residential development is located east of I-5 in the Marine View Gardens and Isla Verde neighborhoods.

Low Density Residential - This category is for single family residences developed at a maximum density of three dwelling units per acre. With an average household size of 2.6 persons per unit, the population density would be approximately eight persons per acre. Most of Solana Beach's low density residential development is located around Nardo Avenue and Rios in the southwest and in the northwest in the Canyon Drive area.

Low/Medium Density Residential - Under this category, single-family residences are to be developed at a maximum density of four dwelling units per acre. The population density in these areas would be approximately eleven persons per acre based on an average household size of 2.6 persons per unit. Most of the residential area in the northeast near Santa Helena and in the northwest near Seabright, Glenmont and Sonrisa are low-medium density.

Medium Density Residential - This category provides for single- and multi-family residential development within a density range of five to seven units per acre. Population densities in these areas could be as high as 19 persons per acre assuming development intensities of seven units per

acre and an average household size of 2.6 persons per unit. This type of residential development is located along the south side of Lomas Santa Fe Drive (east of Los Banderos Road), along the coastal bluffs north of the Plaza, and in the Eden Gardens neighborhood.

Medium-High Density Residential - This category is for multi-family residential development within a density range of eight to twelve units per acre. With an average household size of 2.6 persons per unit, population densities in these areas would be maximum of about 32 persons per acre assuming maximum development at twelve units per acre. Most of this type of residential development is located in the Eden Gardens neighborhood, and on the north end of Cedros Avenue.

High Density Residential - Multi-family residential development under this category will range between 13 and 20 dwelling units per acre. Assuming maximum development and an average household size of 2.6 persons per unit, population densities in these areas could be as high as approximately 52 persons per acre. Most of Solana Beach's high density residential development is located in the southwestern portion of the city (ie., along the coastal bluffs south of the Plaza and in the area generally bounded by Via de la Valle, Solana Circle, Nardo Avenue, and Stevens Avenue).

<u>Light Commercial</u> - This category provides for a range of commercial uses that have a minimal impact on nearby residential areas. Areas designated for light commercial are north of Lomas Santa Fe Drive between Rios Avenue and Granados Avenue, and north of Cliff Street between Cedros Avenue and Seabright Lane.

In order to implement the City's Redevelopment Plan, Mixed-Use Concepts of the Highway 101 Vicinity Specific Plan and the Housing Element, residential uses are allowed as a secondary use in conjunction with permitted commercial uses. The Zoning Ordinance shall specify limitations as to the relationship of residential to on-site commercial uses.*

<u>Special Commercial</u> - Commercial development in this area would involve primarily a range of commercial and light industrial uses that have a limited impact upon nearby residential areas. The only locations in the City designated as Special Commercial include the area along Cedros Avenue and a site at the northeast corner of Stevens Avenue and Genevieve Street.

In order to implement the City's Redevelopment Plan, Mixed-Use Concepts of the Highway 101 Vicinity Specific Plan and the Housing Element, residential uses are allowed as a secondary use in conjunction with permitted commercial uses. The Zoning Ordinance shall specify limitations as to the relationship of residential to on-site commercial uses.*

^{*}GPA-2, Res. 91-92 adopted Oct. 21, 1991

General Commercial - This category involves the development of tourist-oriented commercial uses and retail uses of a larger scale than those permitted in Special Commercial areas such as grocery stores, drug stores, etc. The City's General Commercial areas are located primarily along Highway 101 and along Lomas Santa Fe Drive.

In order to implement the City's Redevelopment Plan, Mixed-Use Concepts of the Highway 101 Vicinity Specific Plan and the Housing Element, residential uses are allowed as a secondary use in conjunction with permitted commercial uses. The Zoning Ordinance shall specify limitations as to the relationship of residential to on-site commercial uses.*

<u>Light Industry</u> - This category provides for light manufacturing, miniwarehousing, and research and development uses. The only areas designated for light industrial use are the Kaypro site along Stevens Avenue and a site at the southeast corner of Valley Avenue and Hernandez Street.

<u>Public/Institutional</u> - This category includes schools, churches, civic center and other public uses. Most of these uses are located in the vicinity of the Lomas Santa Fe Drive/Stevens Avenue intersection.

Office/Professional - This category provides for professional offices (eg., medical and dental centers, financial services, etc.) and general office uses. Such uses are designated at sites along Lomas Santa Fe Drive, Stevens Avenue, Marine View Avenue and Pimlico Drive.

Open Space/Recreation - This category includes open space uses, such as San Elijo Lagoon and San Dieguito Park, and recreational uses focused on outdoor activities (eg., public parks, Lomas Santa Fe golf courses, etc.). Any structures constructed shall be integral components of the recreational uses and should be at a scale that is compatible with the recreational site. The key focus of open space is the Holmwood Canyon area, while recreational uses consist of beach parks, city parks and the golf courses located east of I-5. Owners of existing privately owned legal lots within this land use category may construct or alter one single family residential structure in accordance with the city's zoning and other land use standards.

<u>Agriculture</u> - This category provides for land uses only involving floriculture operations. The only site with this designation is the area north of Patty Hill Drive between Rios Avenue and Barbara Avenue.

<u>Right-Of-Way</u> - This category provides for land uses that are limited to transportation, public utilities, recreation and other similar uses.

^{*}GPA-2, Res. 91-92 Adopted Oct. 21, 1991

TABLE 3 CONSISTENCY MATRIX

ZONING DISTRICT

GENERAL PLAN				\$ 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								weight in	1 23 C				Lo Mod
DESIGNATION		8/ Q Q	×/.0°<	\$\\\ 700 \	10 / 1/2 C	&/XX	8/58) ² /\ ³ 0	?/&°C	3,0,0	0/304	0 P	1020	2/02.6		8 / 410s	
Estate Residential	*														*		
Low Density Residential		*													*		
Low/Medium Density Residential			*												*		
Medium Residential				*											*		
Medium-High Residential					*										*		
High Residential						*									*		
Special Commercial							*										
Light Commercial								*									
General Commercial									*								
Light Industry											*						
Public/Institutional													*				
Office/Professional										*							
Open Space/Recreation	*	*												*			
Agriculture												*					
Right-of-Way												*		*		*	

Designates Situation In Which Zoning and General Plan Designations are Generally Consistent





SOLANA BEACH GENERAL PLAN HOUSING ELEMENT

CITY OF SOLANA BEACH

380 Stevens Avenue, Suite 120 Solana Beach, California 92075 (619) 755-2998

Solana Beach City Council

Celine Olson, Mayor

Margaret Schlesinger, Deputy Mayor

Marion Dodson, Council Member

Richard Hendlin, Council Member

Paul Tompkins, Council Member

First Adopted November 14, 1988

Major Revisions Adopted April 16, 1992



TABLE OF CONTENTS

SECTION	PAGE
1. INTRODUCTION	
OVERVIEW	1-1
BACKGROUND	
AUTHORIZATION	1-2
ORGANIZATION	1-3
DATA SOURCES	1-3
CITIZEN PARTICIPATION	1-4
CONSISTENCY WITH OTHER GENERAL PLAN ELEMENTS	1-5
REVIEW AND REVISION	
INTRODUCTION	2-1
EFFECTIVENESS OF THE ELEMENT	2-1
PROGRESS IN IMPLEMENTATION	2-2
APPROPRIATENESS	2-4
ADDITIONAL REQUIREMENTS FOR JURISDICTIONS IN THE COASTAL ZONE	2-4
HOUSING NEEDS, RESOURCES AND CONSTRAINTS	
INTRODUCTION	3-1
HOUSING NEEDS ASSESSMENT	3-2
REGIONÁL SETTING	3-2
Population and Employment Trends	3-9

TABLE OF CONTENTS (CONT.)

SECTION	PAGE
3. HOUSING NEEDS, RESOURCES AND CONSTRAINTS (CONT'D.)	
HOUSEHOLD AND HOUSING CHARACTERISTICS	3-14
Level of Payment Compared to Ability to Pay	3-14
Housing Characteristics Overcrowded Households	3-18 3-19
Housing Stock Condition	3-19
SITE AVAILABILITY	3-21
Land Suitable for Residential Development	3-21
Inventory of Land in Comparison to Need	3-28
GOVERNMENTAL CONSTRAINTS	3-29
Land Use Controls	3-29
Land Use Controls Building Code and Enforcement	3-32
On and Off-Site Improvements	3-32
Fees and Other Exactions Processing and Permit Procedures	3-34
Processing and Permit Procedures	5-34
NON-GOVERNMENTAL CONSTRAINTS	3-38
Availability of Financing	3-38
Article 34	3-39
Price of Land	3-40
Cost of Construction	3-40
Housing Costs	3-41
SPECIAL HOUSING NEEDS	3-44
HOUSING INDICATORS SPECIAL NEEDS	3-44
Elderly	3-44
Handicapped	3-45
Family/Large Households	3-46
FarmworkersSingle Parent/Female Headed Households	3-47
Single Parent/Female Headed Households	3-47
HomelessSummary of Existing Resources and Unmet Needs	3-49
Summary of Existing Resources and Unmet Needs	3-31
ENERGY CONSERVATION OPPORTUNITIES	3-54
ASSISTED HOUSING AT RISK OF CONVERSION	
TO MARKET RATE HOUSING	3-56

TABLE OF CONTENTS (CONT.)

SECTION	PAGE
GOALS, POLICIES & QUANTIFIED OBJECTIVES	
INTRODUCTION	4-1
BACKGROUND	4-2
Legislative Findings and Intent Housing Program Strategies Community Goals and Values 1991 Housing Needs, Resources & Constraints	4-3
QUANTIFIED OBJECTIVES	
5. 5-YEAR HOUSING PROGRAM	
INTRODUCTION	5-1
PROGRAM SUMMARY	5-1
ADEQUATE HOUSING SITES	5-3
Zoning and Development Standards Public Services and Facilities Development Impact Fee Variety of Housing Types	5-7 5-7
AFFORDABLE HOUSING DEVELOPMENT	
Housing Production Incentives	5-13
REMOVAL OF GOVERNMENTAL CONSTRAINTS	5-19
HOUSING CONSERVATION AND IMPROVEMENT	5-21
Affordability ConservationStructural Conservation	5-21 5-24
EQUAL HOUSING OPPORTUNITY	5-26
ASSISTED HOUSING RISK OF CONVERSION TO MARKET RATE HOUSING	5-27

LIST OF TABLES

LAI	3 L E	PAGE
1.	Employment by Industry	3-8
2.	Employment by Industry Regional Share - July 1991 to June 1996	3-13
3.	Regional Housing Needs Statement	3-15
4.	Regional Housing Needs Statement Level of Housing Payment Compared to Ability-to-Pay	3-16
5.	Household Income Distribution - 1991	3-17
6.	Household Income Distribution - 1991 Household Income Distribution by Group - 1991	3-17
7.	Housing Stock Composition - 1991	3-18
8.	Tenure by Units in Structure - 1990	3-20
9.	Overcrowded Households by Tenure - 1990	3-20
10.	1990-1991 Construction industry Federation Regional Fee Survey	3-30
11.	Residential Development Impact Fees as Levied by Jurisdiction	3-37
12.	Monthly Mortgage Payments	3-40
13.	Median Cost of Resale Homes	3-42
14.	Value of Owner-Occupied Housing - 1990	3-43
15. 16.	Distribution of Contract Rents - 1990	3-43
17.	Age of Householder by Tenure - 1990	5-44 3 16
18.	Household Size Distribution - 1990	5-40 5-8
10.	Dand Ose Fran Statistical Summary	5-0
<u>CH</u>	LIST OF CHARTS	PAGE
1.	Progress Report — 1988 to 1991	2-3
2.	Summary of Land Use Controls	3-30
3.	Summary of Site Improvement Requirements for Residential Projects	3-33
4.	Objectives, Policies and Program Actions	4-7
5.	Adequate Housing Sites Program	5-4
6.	Adequate Housing Sites Program Affordable Housing Development Program	5-12
7.	Housing Conservation and Improvement Program	5-22
	LIST OF EXHIBITS	
EXE	IIBIT	PAGE
1.	Regional Location	3-4
2.	Site Vicinity	3-5
3.	Aerial PhotographVacant Sites	3-6
4.	Vacant Sites	3-24
	LIST OF FIGURES	
FIG	URE	PAGE
1.	Figure	3-22

OVERVIEW

In 1967, a housing element became the third mandated part of a General Plan. During the ensuing 15 years numerous revisions were made to the required contents of community housing elements. In 1981, Article 10.6 of the Government Code was enacted and now describes the content requirements of local housing elements. This legislation, commonly referred to as the Roos Bill, requires that a local housing element include an assessment of housing needs; an inventory of resources and constraints; a statement of goals, policies and objectives; and a five-year housing program.

The City's Housing Element must be updated by mid-year 1991, according to Article 10.6 of the Government Code. An updated element must:

- 1. Comply with the substantive requirements of current housing element law (Article 10.6 of the Government Code, comprised of Sections 65580-65589.5).
- 2. Include a review of the housing element adopted in 1988 encompassing an evaluation of its effectiveness, progress in implementation, and appropriateness of goals, objectives and policies.
- 3. Incorporate a new five-year planning period covering 1991 to 1996.
- 4. Update existing and future housing needs based on the data prepared by the San Diego Association of Governments (SANDAG).
- 5. Provide current information on site availability.
- 6. Revise goals, policies, objectives and programs to reflect the new needs analysis and evaluation of the 1988 Housing Element.

BACKGROUND

Solana Beach's General Plan consists of seven required and one optional elements which set forth the character of the community in terms of land use, open space, circulation and other features of physical, social and environmental importance. One of the eight elements of the General Plan is the Housing Element. According to Article 10.6 of the Government Code:

The Housing Element shall consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The Housing Element shall identify adequate sites for housing, including rental housing, factory-built housing, and mobilehomes, and shall make adequate provision for the existing and projected needs of all economic segments of the community.

There are three subject areas that must be covered in a housing element including:

- An assessment of housing needs and an evaluation of resources and constraints relevant to meeting these needs;
- A statement of the community's housing goals, quantified objectives and policies; and
- A housing program setting forth a 5-year schedule of implementation actions.

AUTHORIZATION

Housing elements were first mandated by legislation enacted about two decades ago in 1967. In 1977, "Housing Element Guidelines" were published by the State Department of Housing and Community Development (D/HCD). The "guidelines" spelled out not only the detailed content requirements of housing elements but also gave the D/HCD a "review and approval" function over this element of the General Plan. In 1981, the Roos Bill was passed, thereby enacting Article 10.6 of the Government Code. This bill, in effect, placed the guidelines into statutory language and changed the D/HCD's role from "review and approval" to one of "review and comment" on local housing elements.

The intent of this document is to establish appropriate new policy and to reaffirm existing goals, policies and priorities set forth three years ago in the 1988 document. The purpose of the Element is to produce new, updated information and to comply with the periodic updating requirements of Article 10.6.

ORGANIZATION

The updated Housing Element is organized according to the major topics that must be considered by the City to comply with State law. These topics include:

- Section 2 -- Progress Report to explain the affectiveness, appropriateness and achievements of the previous Housing Element.
- Section 3 -- Housing Needs, Resources & Constraints associated with a wide variety of demand and supply factors (as listed on page 3-1).
- Section 4 -- Goals, Policies & Quantified Objectives relative to the maintenance, improvement, and development of housing.
- Section 5 -- 5-Year Housing Program to explain the City's planned actions to address Solana Beach's housing needs.

DATA SOURCES

Several sources of information were relied upon to prepare the Housing Element Update including:

- √ San Diego Association of Governments, <u>Regional Housing Needs Statement</u>, (December 1990). This data source is used for the quantification of "existing" and "projected" needs. The SANDAG data must be used in local housing elements pursuant to State law and a State Attorney General's opinion.
- √ 1990 U.S. Census of Population and Housing. Appendix A contains the most detailed data currently (June 1991) available from the 1990 Census.
- √ California State Department of Finance, Demographic Research Unit, "County Population and Housing Unit Estimates". This data source is used to track trends on total population, households, and housing stock composition from 1980 to 1990.

- √ Current housing cost data as supplied by local realtors and by a sample of apartment rental rates.
- √ City of Solana Beach, <u>Public Opinion Survey</u>, (May 1989).

CITIZEN PARTICIPATION

State housing law encourages cities to involve all economic segments of the community in the preparation of the element. The 1988 Housing Element was prepared in conjunction with the City's first comprehensive General Plan. Throughout the general planning program, citizens were encouraged to participate on four levels:

- 1. <u>Community Forum</u> a community forum was held on January 29, 1987. The purpose of the forum was to allow a briefing for the public at large at the beginning of the general plan development.
- 2. <u>Area Committee Meetings</u>—the City Council established seven area communities to oversee planning and development within each geographic area of the City. Meetings were held during February 1987, with each area committee, at which time Committee members and residents were afforded an opportunity to discuss general plan issues, including housing concerns.
- 3. <u>Element Committee Meetings</u>—one meeting was held to specifically address the Housing Element. The meeting was conducted on a workshop basis and members of the general populace were encouraged to identify housing issues.
- 4. <u>General Plan Advisory Committee</u> the Solana Beach City Council formed the committee to oversee the development of the general plan and its component elements. The committee, consisting of representatives of the seven geographical areas of the city, was active in the development of goals, objectives, policies, as well as review of the draft general plan documents.

Since the present element was prepared so recently, a special committee was not established for the update. The citizen participation program will involve public meetings and hearings before the City Council both before and following submission to the Housing and Community Development Department. (Note: Solana Beach does not have a Planning Commission. The City Council acts as the Planning Agency and legislative body.) In addition, the Draft Housing Element will be available at the City Hall and library for review by the public. Copies of the draft also were distributed to interested housing organizations including, but not limited to:

- √ Community Resource Center
- √ Legal Aid Society
- √ Seniors groups
- √ Building Industry Organization

CONSISTENCY WITH OTHER GENERAL PLAN ELEMENTS

The Housing Element was prepared concurrently with the development of the City's first General Plan. The Element was prepared through an extensive citizen participation program and public hearing process. The City's planning staff has determined that the goals and objectives of the Housing Element can be attained or implemented without the need for amendment to other General Plan Elements. Further, the City Council has adopted a Redevelopment Plan for the Highway 101 corridor and certain adjacent areas, and for the commercial area surrounding Stevens Avenue by the vicinity of Eden Gardens. The Redevelopment Plan was adopted as a tool specified in the 1988 Housing Element to assist in providing housing affordable to low and moderate income persons and families. The Redevelopment Plan established certain housing options not specifically identified in the current land use element including mixed-use residential development in conjunction with commercial development. The City is currently adopting ordinances implementing the provision for mixed use development. Consequently, the Housing Element is internally consistent with the balance of the General Plan, particularly the Land Use, Open Space and Conservation Elements.

INTRODUCTION

Section 65588(a) of the Government Code requires that the City review the 1988 Housing Element to evaluate:

- "Effectiveness of the element" (Section 65588 [a][2]): A comparison of the actual results of the earlier element with its goals, objectives, policies and programs. The results should be quantified where possible (e.g., rehabilitation results), but may be qualitative where necessary (e.g., mitigation of government constraints).
- "Progress in implementation" (Section 65583 [a[3]): An analysis of the significant differences between what was projected or planned in the earlier element and what was achieved.
- "Appropriateness of goals, objectives and policies" (Section 65588 [a][1]): A description of how the goals, objectives, policies and programs of the updated element incorporate what has been learned from the results of the prior element.

EFFECTIVENESS OF THE ELEMENT

Only 2-1/2 years have elapsed since the City adopted the Housing Element. During this time, the City has produced several results in the following areas: new production; residential rehabilitation; housing affordability; mitigation of governmental constraints; and equal housing opportunity.

Based on available data, there are presently 81 households being assisted by the Section 8 rental assistance program and two apartment developments that include density bonus units.

With regard to housing affordability, the City has participated extensively in a mixed use planned development that will result in the construction of 32 SRO units which according to the conditions of development shall be reserved for low income housing. In the area of the mitigation of governmental constraints, the City has established a community redevelopment agency and is in the process of preparing the zoning code. Finally, the City's continued participation in the Community Development Block Grant Program has contributed to assuring equal housing opportunities through the certification process.

PROGRESS IN IMPLEMENTATION

According to State law, this subject refers to "an analysis of the significant differences between what was projected or planned and what was achieved." Chart 1 summarizes the intent and purpose of the 1988 Housing Element with reference to:

- Program Category
 Planned Actions
- Level of Achievement

The City's "progress in implementation" is discussed in the third column of Chart 1 -- Level of Achievement. Most areas experienced significant progress, as explained in the Chart. The areas needing renewed commitment have been identified and are a particular focus of the new 5-Year Housing Program (1991-1996).

CHART 1 CITY OF SOLANA BEACH: HOUSING ELEMENT PROGRESS REPORT — 1988 TO 1991

Program Category	Planned Action	Level of Achievement				
Conserve Exist Affordable Housing	#1 Continue to Utilize Section 8	Ongoing; City did a bilingual mailer to Eden Gardens explaining housing opportunities.				
	#2 Develop a Residential Code Enforcement Program.	Active code enforcement.				
	#3 Develop an Occupancy Inspec- tion Ordinance.	Presently inspect houses to ensure UBC compliance.				
	#4 Conduct a Housing Condition Survey.	1990 Census; 1991 reconnaissance survey.				
	#5 Utilize County Housing Authority Services.	County Housing and Community Development.				
	#6 Prepare a Condominium Conversion Ordinance.	General Plan prohibits conversions unless a 6% vacancy exists.				
Assist in Low/Moderate Income Housing Development	#7 Develop Affordable Housing In- Lieu Fee Ordinance.	Not accomplished; to be continued in new 5-year program.				
	#8 Establish Redevelopment Agency and 20% Set-Aside Fund.	Established in 1990.				
Provision of Adequate Housing Sites	#9 Identify New Mobile Home Development Standards.	Included in new Zoning Ordinance.				
	#10 Prepare a Second Unit Ordinance	Included in new Zoning Ordinance.				
Removal of Governmental Constraints	#11 Encourage Affordable Housing by Development Incentives.	On-going; including mixed use community rail project with affordable housing.				
Promote Equal Housing Opportunity	#12 Establish a Housing Referral and Information Service.	Through County Housing and Community Development Department and Community Resource Centers.				
	#13 Utilize County Housing Authority for Provision of Fair Housing Services.	Ongoing CDBG				
	#14 Conduct Survey of Rental Hous- ing Suitable for Handicapped and Elderly Occupants.	1990 Census.				

APPROPRIATENESS

Most of the City's goals, policies, quantitative objectives and programs are appropriate to continue in the new Housing Element. However, some revisions are in order to satisfy community goals and meet the letter and spirit of State housing law. Other program actions are unnecessary such as an occupancy inspection ordinance since there is now an adequate code enforcement program. A matrix chart has been prepared to identify the various policies which are intended to meet the numerical targets. Moreover, action programs to implement each policy are also identified. In addition, the new 5-year housing program has been reorganized to more adequately convey the actions which are to be implemented.

ADDITIONAL REQUIREMENTS FOR JURISDICTIONS IN THE COASTAL ZONE

Section 65588 of the Government Code requires that, in housing element updates, coastal jurisdictions document the number of low- and moderate-income housing units converted or demolished, and the number of replacement units provided. Section 65588 also requires that revisions of the housing element must include, for the coastal zone, the following:

- 1. Number of new units approved for construction after January 1, 1982.
- 2. Number of units for low- and moderate-income households required to be provided either within the coastal zone or within three miles of it.
- 3. Number of units occupied by low- and moderate-income households and authorized to be demolished or converted since January 1, 1982.
- 4. Number of units for low and moderate-income households required either within the coastal zone or within three miles in order to replace those being demolished or converted.

Since the City was incorporated in 1986, contact was made with the County of San Diego to estimate the number of housing units in categories 1-4 above. The County is unable to provide these estimates for the years 1982 through 1986. The County provided building services through July 1987 and after that date the City assumed this service. Since 1986, after incorporation, the Coastal Zone data are as follows:

- 1. New Construction = 86
- New Low Moderate Income Housing = 1; 35 approved
- 3. Demolished/Converted Low/Moderate Income Housing = 4
- 4. Replacement Low/Moderate Income Housing = 0

INTRODUCTION

According to Article 10.6, Section 65583 (a), of the Government Code, a housing element must contain: "An assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs. The assessment and inventory shall include the following:

- 1. Analysis of population and employment trends and documentation of projections and a quantification of the locality's existing and projected housing needs for all income levels. These existing and projected needs shall include the locality's share of the regional housing need in accordance with Section 65584.
- 2. Analysis and documentation of household characteristics, including level of payment compared to ability to pay, housing characteristics, including overcrowding, and housing stock condition.
- 3. An inventory of land suitable for residential development, including vacant sites and sites having potential for redevelopment, and an analysis of the relationship of zoning and public facilities and services to these sites.
- 4. Analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures.
- 5. Analysis of potential and actual non-governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the availability of financing, the price of land, and the cost of construction.
- 6. Analysis of any special housing needs, such as those of the handicapped, elderly, large families, farmworkers, families with female heads of households, and families and persons in need of emergency shelter.
- 7. Analysis of opportunities for energy conservation with respect to residential development.

8. An assessment of existing assisted housing developments that are eligible to change to non-low income housing uses during the next 10 years due to termination of subsidy contracts, mortgage prepayment, or expiration of use contracts."

The purpose of Section 3 is to provide data, information and analysis that responds to these housing element planning requirements:

HOUSING NEEDS ASSESSMENT

Section 65583 (a)(1), as noted above, requires that one part of the housing needs assessment include:

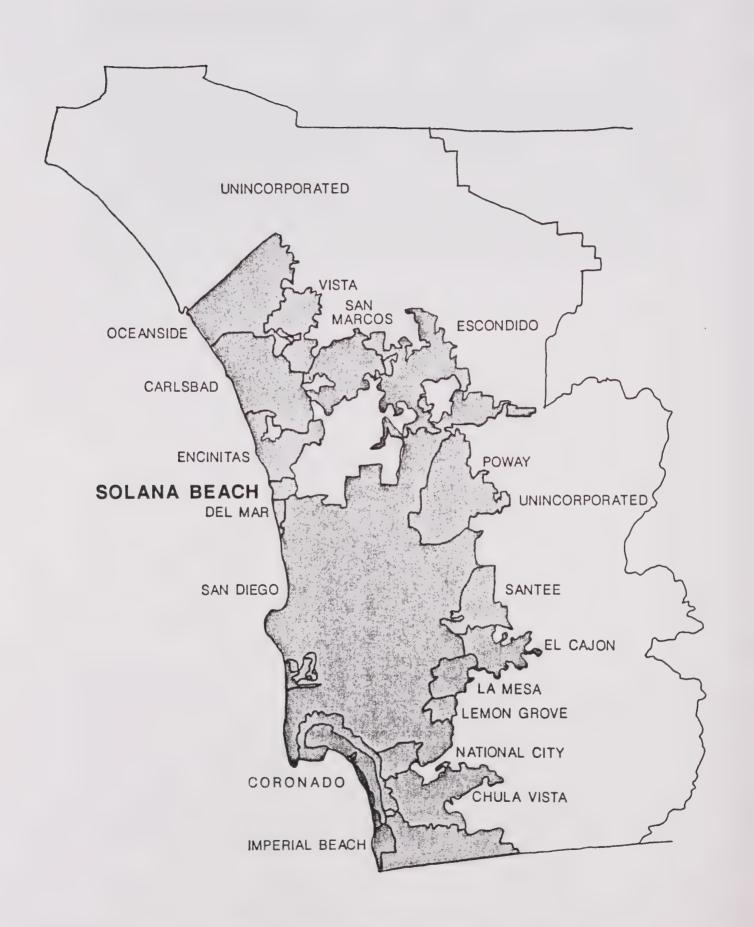
- Analysis of population and employment trends.
- Documentation of population and employment projections.
- Quantification of existing needs.
- Quantification of projected needs.

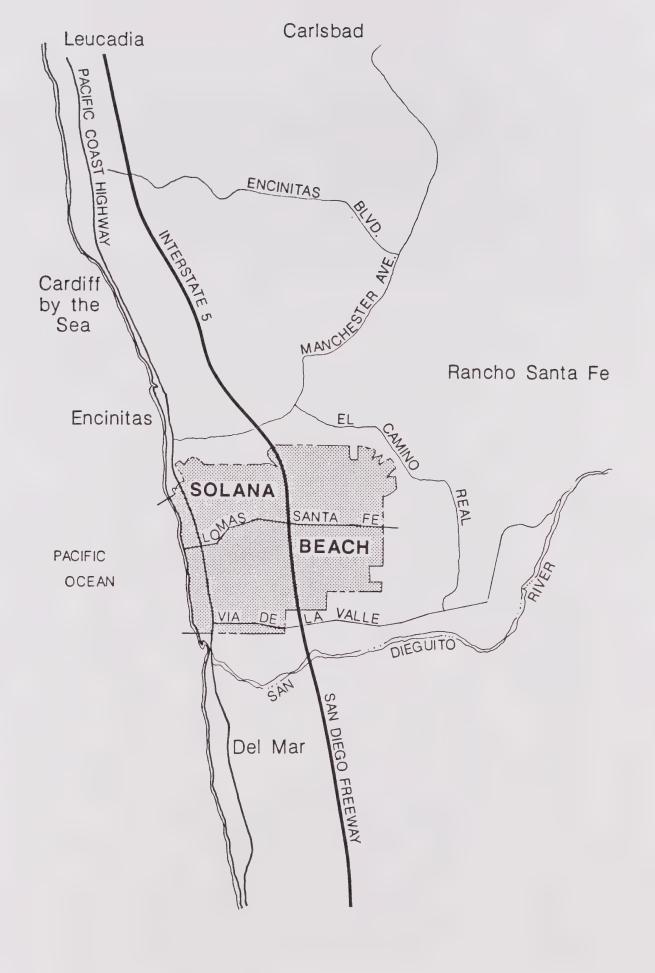
The assessment of existing and projected needs must include the locality's share of the regional housing need, as explained earlier.

REGIONAL SETTING

Solana Beach is located on the central coast of San Diego County. To the north, the San Elijo Lagoon is partially within and adjacent to the City, beyond which is the City of Encinitas. To the east are unincorporated areas of San Diego County which include San Dieguito Regional Park and the inland communities of Rancho Santa Fe and Fairbanks Ranch. To the south, Solana Beach is bounded by the cities of San Diego and Del Mar. The City is bisected by Interstate 5 (I-5), which provides the principal transportation link between the Los Angeles and San Diego metropolitan areas. Amtrak provides rail service through Solana Beach as it spans the distance from San Diego to Los Angeles and other northbound destinations.

Three exhibits depict the city's regional setting and development characteristics. The City's regional location is shown on Exhibit 1 which outlines the boundaries of unincorporated jurisdictions and the County of San Diego. The boundaries of Solana Beach in relation to nearby communities are delineated in greater detail on Exhibit 2. An aerial photograph showing the development character of Solana Beach is Exhibit 3. The City is landlocked with no room to expand its boundaries due to the Sphere of Influence boundaries and adjacent incorporated cities. There is no vacant land east of the I-5 Freeway; all undeveloped land is limited to 11 sites between the Pacific Ocean and the I-5 Freeway.







Aerial Photo SOLANA BEACH HOUSING ELEMENT

Population and Employment Trends

Population Trends

When the City was incorporated, the City's population was estimated to be 14,892. At the time of the April 1990 Census, the estimated population was 12,962. More recently, the State Department of Finance has estimated a population of 13,024 as of January 1991. Thus, the City's population has not increased since the date of incorporation. The apparent decline in population is due to an increase in the vacancy rate and decrease in the average household size. There is also an apparent increase in the number of housing units purchased in Solana Beach as second homes.

Employment Trends

According to Table 1, there are almost 7,500 jobs in the City of Solana Beach. More than 50% of the jobs are available in the "retail trade" and "services" sectors. Most of the other economic sectors constitute only a small percentage of the community's economic base.

TABLE 1 CITY OF SOLANA BEACH EMPLOYMENT BY INDUSTRY — 1988

	Number Employed	Percentage Distribution
Agriculture, Forestry Fishing, Mining	308	4.1%
Construction	570	7.6%
Manufacturing	591	7.9%
Transportation, Communication, Utilities	137	1.8%
Wholesale Trade	238	3.2%
Retail Trade	1,632	21.9%
Finance, Insurance and Real Estate	1,018	13.6%
Services	2,462	33.0%
Government, Military	504	6.9%
TOTAL:	7,460	100.0%

Source:

San Diego Association of Governments, <u>Regional Housing Needs Assessment</u>, Table 27, (July 1990).

Population and Employment Projections

Population Projections

Projections of future population were established during the 1988 General Plan program. At full build out the general plan will accommodate an estimated 6,536 residential units. Residential in turn will accommodate an estimated population of 16,897, computed as follows:

	Number of Units	Population Per Unit	Population
Single-Family	3,424	2.89	9,895
Multiple-Family	3,112	2.25	7,002
Mobile Homes		2.00	
Total:	6,536		16,897

The above projections are predicated upon current per unit population densities. According to the State Department of Finance, the City's housing stock contained 6,394 dwellings. Residential development on vacant land is about 250 housing units; therefore, if the City does achieve the five-year share of regional need figure by 1996 the General Plan build-out also will be reached.

Employment Projections

According to the City's Economic Element, full build-out of the General Plan will provide for approximately 2.5 million square feet of commercial building space in the City, as follows:

	# Acres	# S.F.
General Commercial	114.76	1,262,360
Light Commercial	1.90	20,900
Special Commercial	33.70	505,500
Office/Professional	22.40	448,000
Light Industrial	13.10	248,900
Total:	185.86	2,485,660

This amount of space will represent approximately 3.25 times the existing building space, estimated at 764,000 square feet.

A major potential for new commercial development is hotel/motel usage. Much of this usage would likely be located in parcels currently designated for commercial usage, located primarily along Highway 101. The market analysis indicates the capability for development for up to four to six new high-quality hotel complexes, in the range of 600 to 800 units.

Light industrial use is and will continue to be a relatively minor land use factor in the City. At full build out, the General Plan allows for 13.1 acres of such usage, which is projected to accommodate approximately 249,000 square feet of building space.

Based upon Southern California averages, the City's commercial/industrial building space allowed by the General Plan at full buildout will accommodate an estimated 7,600 employees.

Quantification of Existing Housing Needs

Section 65583 (a)(1) of the Government Code requires a quantification of a locality's existing housing needs. This need is measured by the number of lower income households that are spending more than they can afford on housing costs. The 1980 Census indicated that about 1,100 households were paying more than 25% of their income on housing expenses. An estimated 82% of the overpaying households resided in renter-occupied housing.

Projected Needs and Share of Regional Housing Need

Article 10.6 Requirements

Under Section 65584 (a), regional planning agencies such as SANDAG are responsible for determining projected housing needs for all income levels. The projected housing needs must take into consideration seven factors:

- $\sqrt{}$ Market demand for housing
- √ Employment opportunities
- $\sqrt{}$ Availability of suitable sites
- √ Availability of public facilities
- √ Commuting patterns
- $\sqrt{}$ Type and tenure of housing needs
- $\sqrt{}$ Housing needs of farm workers

In addition, the distribution of housing need, pursuant to the state housing element law, must seek to avoid further impacts on jurisdictions with relatively high proportions of lower income households. (About 25% of Solana Beach's households have yearly incomes in the lower income categories.)

State legislation describes the content requirements of local housing elements. According to the State housing element legislation, "... a locality's share of the regional housing needs includes that share of the housing needs of persons at all income levels within the area significantly affected by a jurisdiction's general plan." (Section 65584 (a)). In addition, according to that same section, "Each locality's share shall be determined by the appropriate councils of government consistent with the criteria" set forth by the State Department of Housing and Community Development. In the case of Solana Beach, this appropriate council is SANDAG.

San Diego Association of Governments (SANDAG) Criteria

<u>Definition of Need</u>: "Future Need" is defined as <u>number of additional housing units by income level</u> that will have to be added to each jurisdictions' housing stock from July 1, 1991 to June 30, 1996 in order to meet the projected household increase in the County and adjustment for vacancies.

Income Limits: The U.S. Department of Housing and Urban Development (HUD) estimates "area median family income". A set of factors is used to calculate income limits by "family" size. In HUD regulations, family has the same meaning as household. These income limits are used to categorize households by income. The same circumstances apply to the moderate income level: HCD multiplies HUD's area median family income by a set of factors to determine a set of moderate income limits by household size. The 1991 San Diego County median income was \$41,300. Income limits pertinent to Solana Beach are listed below:

INCOME GROUP GROUP	PERCENT OF REGIONAL MEDIAN INCOME	INCOME LIMITS
Very Low	< 50%	\$0 - \$20,650
Low	51% - 80%	\$20,650 - \$33,040
Moderate	81% - 120%	\$33,040 - \$49,560
Above Moderate	121% +	\$49,560

<u>Future Projected Need</u>: The projected need is 216 housing units during the 1991-96 time period according to the Regional Housing Needs Statement prepared by the San Diego Association of Governments. Table 2 lists the 5-year new construction needs by income group for Solana Beach. These needs provide the basis for calculating the amount of land necessary to have an adequate inventory of housing sites (p. 3-24).

TABLE 2 CITY OF SOLANA BEACH REGIONAL SHARE — JULY 1991 TO JUNE 1996

Income Group		
Very Low	50	23.1%
Low	37	17.2%
Moderate	45	20.8%
Above Moderate	84	38.9%
TOTAL:	216	100.0%

Source:

San Diego Association of Governments, <u>Regional Housing Needs Statement</u>, Table A, (July 1990).

HOUSEHOLD AND HOUSING CHARACTERISTICS

Section 65583 (a)(2) of the Government Code requires that a housing element include an analysis of:

- $\sqrt{}$ Level of payment compared to ability-to-pay;
- √ General housing characteristics;
- √ Overcrowding;
- $\sqrt{}$ Housing stock condition.

Level of Payment Compared to Ability-to-Pay

An analysis of this household characteristic depends on regional income thresholds and the City income and tenure distributions. Data on these characteristics and distributions are contained in Tables 3 and 4. The information presented in these tables is summarized in the following paragraphs.

Regional Income Limits

Table 3 presents income limits for various income groups as of February 1991. As noted, two factors determine each income category: annual household income and the number of persons in the household.

TABLE 3 INCOME LIMITS BY CATEGORY REGIONAL HOUSING NEEDS STATEMENT SAN DIEGO REGION — 1991

Income	Income Limit By Size					
Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person
Very Low	\$14,450	\$16,500	\$18,600	\$20,650	\$22,300	\$23,950
Low	\$23,150	\$26,450	\$29,750	\$33,050	\$35,700	\$38,350
Median	\$28,900	\$33,050	\$37,150	\$41,300	\$44,600	\$47,900
Moderate	\$34,700	\$39,650	\$44,600	\$49,550	\$53,500	\$57,500

Source:

U.S. Housing & Urban Development and State Housing & Community Development Department.

Based on median income of \$41,300 (2/91).

Affordable Monthly Payments

The amount that can be afforded by the income group are calculated in Table 4. The "affordable" monthly level of payments are computed on the basis of an allocation of 30% of monthly income toward housing costs.

TABLE 4
CITY OF SOLANA BEACH: LEVEL OF HOUSING
PAYMENT COMPARED TO ABILITY-TO-PAY — 1991

Persons Per Household	Annual Income Limits	Monthly Level of Payment *
	Very Lo	w Income
1	\$14,450	\$361
2 3	\$16,500	\$412
	\$18,600	\$465
4	\$20,650	\$516
	Lower	<u>Income</u>
1	\$23,150	\$579
2	\$26,450	\$661
3	\$29,750	\$744
4	\$33,050	\$826
	Moderat	e Income
1	\$34,700	\$867
2	\$39,650	\$991
3	\$44,600	\$1,115
4	\$49,550	\$1,239

^{*} Ability-to-pay criterion is 30% of monthly income.

Current Income Distribution

The City's income distribution is summarized in Tables 5 and 6. The first table indicates the number of households in various income intervals. Table 6 groups the households into the four income categories of very low, low, moderate, and above moderate.

TABLE 5 CITY OF SOLANA BEACH HOUSEHOLD INCOME DISTRIBUTION — 1991

Income Interval	Number of Households	Percentage Distribution
\$0-9,999	441	8.0%
\$10,000 - \$14,999	320	5.8%
\$15,000 - \$24,999	778	14.1%
\$25,000 - \$34,999	816	14.8%
\$35,000 - \$49,999	1,059	19.2%
\$50,000 and up	2,101	38.1%
	5,515	100.0%

Source:

Income distributions derived from San Diego Association of Governments, Regional Housing Needs Statement, Table 24, (July 1990).

Number of households derived from State Department of Finance, San Diego

Population and Housing Estimates, January 1, 1991.

Table construction by Castañeda & Associates.

TABLE 6 CITY OF SOLANA BEACH HOUSEHOLD INCOME DISTRIBUTION BY GROUP — 1991

Income Group	Number of Households	Percentage Distribution
Very Low	579	10.5%
Low	805	14.6%
Moderate	932	16.9%
Above Moderate	3,199	58.0%
	5,515	100.0%

Source:

Income distributions derived from San Diego Association of Governments,

Regional Housing Needs Statement, Table 24, (July 1990).

Number of households derived from State Department of Finance, San Diego

Population and Housing Estimates, January 1, 1991.

Housing Characteristics

Housing Stock

As of January 1991, Solana Beach had a housing stock comprised of 6,394 dwelling units. The majority of the housing stock is single-family dwellings; a complete breakdown is listed in Table 7.

TABLE 7 CITY OF SOLANA BEACH HOUSING STOCK COMPOSITION — 1991

Housing Type	Number of Housing Units	Percentage Distribution
Single Family		
Detached	2,853	44.6%
Attached	946	14.8%
Multi-Family		
2 to 4	505	7.9%
5 plus	2,052	32.1%
Mobile Homes	38	0.6%
	6,394	100.0%

Source:

Percentage distribution based on San Diego Association of Governments, <u>Regional Housing Needs Statement</u>, Table 31, (July 1990).

Number of housing units based on State Department of Finance, "San Diego County Population and Housing Estimates", (January 1, 1991).

The housing unit types listed in Table 7 are defined as:

and houseboats.

Single-family dwellings: Single family units that are detached from any other house with open space on all four sides.
 Single-family attached dwellings: Single family units that are attached to other units with adjoining walls extending from ground to roof that separate it from other adjoining structures and forms a property line. Each unit has its own heating system.
 Two-to-four units: Units with two, three, or four housing units in one structure.
 Five-or-more units: Units with five or more housing units in one structure.
 Mobile homes: This includes both occupied and vacant mobile homes

Table 8 on the next page reports on the tenure by housing type based upon the 1990 Census data. Of all the City's occupied housing units, 61.8% were owner-occupied and 38.2% renter-occupied as of April 1990. The total housing stock equalled 6,346 dwellings of which 851, or 13.4%, were vacant at the time of the 1990 Census. About 65% of all owners resided in 1 unit detached structures. An estimated 21% of the renters lived in 1 unit detached structures.

used for residential housing. Also included are any occupied residential units which do not fit into the other categories, such as vans, tents,

Overcrowded Households

A unit is considered overcrowded if it has more than 1.01 or more persons per room (excluding bathrooms, halls, or utility rooms). According to SANDAG, the combination of low income and high housing costs has forced many households to live in overcrowded housing conditions. There are presently less than 300 overcrowded households residing in Solana Beach, according to the 1990 Census. As shown in Table 9 on the next page, the vast majority of overcrowded households are renters.

TABLE 8 CITY OF SOLANA BEACH TENURE BY UNITS IN STRUCTURE — 1990

Units in Structure	Owner Occupied	Renter Occupied	Vacant Units	Total Units
1, detached	2,198	436	136	2,770
1, attached	728	356	241	1,325
2	35	99	12	146
3 or 4	97	148	63	308
5 to 9	101	180	43	324
10 to 19	78	260	193	531
20 to 49	60	314	58	432
50 or more	35	233	91	359
Mobilehome	4	25	2	31
Other	62	46	12	120
	3,398	2,097	851	6,346

Source:

1990 Census of Population and Housing.

Table construction by Castañeda & Associates.

TABLE 9 CITY OF SOLANA BEACH OVERCROWDED HOUSEHOLDS BY TENURE — 1990

Household Size	Owner Occupied	Renter Occupied	Total Households	Percentage Disrtribution
1.01 to 1.50	28	76	104	38.0%
1.51 to 2.00	7	75	82	29.9%
2.01 or more	3	85	88	32.1%
	38	236	274	100.0%

Source:

1990 Census of Population and Housing.

Housing Stock Condition

Data on the condition of the existing housing stock are based on the age of housing in the City and a field reconnaissance survey conducted in April 1991. The results of this survey revealed that an extensive amount of private remodeling and rehabilitation has taken place in the past 2-1/2 years (1988-1991). The quantified housing improvement needs are estimated as:

- Housing Units Needing Rehabilitation = 25
- Housing Units Needing Replacement = 5

SITE AVAILABILITY

Section 65583 (a)(3) of the Government Code requires that the housing element include a site availability analysis with respect to:

- An inventory of land suitable for residential development, including vacant sites and sites having potential for redevelopment.
- An analysis of zoning in relationship to those sites.
- Adequacy of public services and facilities to the sites.

Land Suitable for Residential Development

Overview

State law requires an inventory of land suitable for residential development. The main requirement is that there is sufficient land to accommodate the City's share of regional need. Figure 1 on the next page denotes the various components of an adequate sites analysis. The information in that figure was prepared by the State HCD to guide cities in completing the analysis of land suitable for residential development.

FIGURE 1 LOCAL ADEQUATE SITES ANALYSIS

1. Adequate Residential Development Capacity?

Housing Needs Assessment 65583 (a) (1)

Land Inventory 65583 (a) (3)

Identify Adequate Sites 65582 (c) (1)

5-Year New Construction Need

 Includes locality's share of regional need by income group Existing Residential Development Capacity

- 5-year supply of vacant residential land
- Redevelopment potential based on public and private recycling trends

Need/Capacily Shortfall

 Identify program actions to increase developable supply of land (e.g. annexation)

Governmental Constraints 65583 (a) (4) Non-Governmental Constraints 65583 (a) (5)

Analyze Local Constraints

- Zoning and development standards
- Permit and processing procedures

Analyze Alternate Housing Costs

- Land costs at various résidential densitées
- Housing prices for various housing types (e.g., mobilehome, second unit)

2. Adequate Variety of Housing type?

Projected Need by Income Level

- Very Low
- * Other Lower
- Moderate
- Above Moderate

Available Sites for Variety of Housing Type and Density

- 23-29 du/ac (e.g., multi-family rentat)
- 15-22 du/ac (e.g., multi-family rental or ownership)
- 7-14 du/ac (e.g., attached single-family, multi-family)
- 0-07 du/ac (e.g., detached s.f.)

Inadequate Variety/Type

 Identify program actions to increase variety of type and density (e.g., increase residential densities) Exhibit 4 delineates the location of 11 sites suitable for residential development. (There are no sites available east of the I-5 Freeway.) More specific information is presented on the 11 sites following Exhibit 4.

Vacant Sites

The vacant sites include:

#1 #9 #3 #11

Site #10 is currently being used for agriculture (flowers and row crops).

Redevelopment Sites

Nine of the 11 sites are located within the boundaries of the redevelopment project area. Sites #2 and #10 are not located within the redevelopment project area.

Zoning

Existing zoning is denoted in the Chart. Only two sites are presently zoned for residential uses — #2 and #9.

Public Services and Facilities

Services and facilities are generally adequate within the City to accommodate residential development of these sites. No major infrastructure improvements are necessary to meet the need generated by the future residential development; however, upgrading and/or replacement of infrasturcture may be necessary on some sites.



Vacant Sites, Redevelopment Sites, Boundaries of Redevelopment Area SOLANA BEACH HOUSING ELEMENT



SITE AVAILABILITY ANALYSIS

Site #	Location	Site	Existing Use	Zoning	Surrounding Uses	Notes
# 1	A triangular-shaped parcel bounded on the west by Coast Hwy., on the east by AT & SF Railway and on the north by Corporate boundary.	3.1 acres	Vacant	Visitor Serving Commercial	Single Family residential to the west across Coast Hwy. Vacant state-owned Lagoon and commercial (real estate office) to the north; single family residential to the east across AT & SF Railroad.	143-room hotel is proposed for the site. All discretionary approvals given-pending building permits.
# 2	On the north side of AcademyRoadadjacent to the Route 5 Freeway.	16 acres	Christian School	Holding Area and High Density Residential	Freeway to the east; Commercial (Marshall's Department Store) to the north; Office Commer- cial to the west; apart- ments and Commercial to the south across Academy Road.	Initial discussions with the School have been for a mixed use project consisting of Commer- cial and mutli-family residential.
# 3	End of, and on south side of terminus of Jack Drive (cul-de-sac).	1 acre	Vacant	Industrial	Surrounded by industrial uses except parcel backs up to single family residential on the south.	Site has near-term po- tential for industrial development.
# 4	Between Coast Hwy. and Sierra Drive, approximately midway between Plaza and Dahlia Drive.	2 acres	Trailer Park	Medium Commercial	New Commercial Center to the north; older commercial to the south; newer Condominium Complex to the west across Sierra Drive.	Older trailer park with poor/small trailers. Owners of property have expressed interest in closing trailer park Redevelopment Use and, commercial is suggested.

CITY OF SOLANA BEACH SITE AVAILABILITY ANALYSIS

Site#	Location	Site	Existing Use	Zoning	Surrounding Uses	Notes
# 5	West side of Coast Hwy.	10,000 sq. ft.	Turf Motel	Medium Commercial	Night Club (Diego's) to the south; Older Com- mercial to the north; extension of Club Di- ego's parking lot to the west.	Motel is older - appears to be of 1950's vintage.
# 6	Adajcent to, and immediately north of Site #9.	10,000 sq. ft.	Retail Commercial	Medium Commercial	Older retail commercial to the south; new apartments to the north; real estate office to the west.	Potential to combine with Site #5 for a half-acre site.
# 7	Eastside of Sierra Drive.	1/2 acre	Vacant	Commercial	Condominium Complex to the west across Sierra Drive; apartments to the south; Club Diego's parking lot to the north.	
#8	Between Coast Hwy. and Sierra Drive; across from U.S. Post Office on Sierra Drive.	1/2 acre	Commercial	Medium Commercial	New commercial center and older commercial to the north; newer office building to the south; Post Office and Condominium Complex to the west across Sierra Drive.	Site is older commercial.

CITY OF SOLANA BEACH SITE AVAILABILITY ANALYSIS

Site#	Location	Site	Existing Use	Zoning	Surrounding Uses	Notes
# 9	Southeast corner of Lomas Santa Fe Drive and Granados Avenue.	1.5 acres	Vacant	Low-Medium Residential	New Office Building to the west across Gran- dados; single family residential to the north across Lomas Santa Fe Drive; single family residential to the south and east.	Potential City Hall site.
# 10	East side of Rios Avenue, north of Patty Hill Drive.	16 acres	Agriculture (flowers and Row Crops)	Agriculture	Single family residential to the west, south and east; vacant/lagoon to the north across the City Corporate boundary.	Last major undeveloped parcel within the City.
# 11	West side of Cedros Avenue, north of Lomas Santa Fe Drive.	4 acres	Vacant	Heavy Commercial	AT & SF Railroad and Costa Hwy. to the west; lumber yard to the south; older (substandard) single family to the north; mixed single family, industrial, school and multiple family to the east across Adros Avenue.	With exception of the Lumber Yard, area uses and buildings are marginal - condition generally poor.
# 12	End of Jack Drive, next to Site #3.	10 acres	Kaypro Computer Industrial Land Headquarters.	Industrial	School to the north, single-family to the west and south, storage building to the east.	200 residential unit General Plan Amend- ment submitted.

Inventory of Land in Comparison to Need

Sites #2, 9, 10, 11 and 12 are the sites most suitable for residential development within the five-year planning period. The holding capacity assumptions are noted below:

• Site #2:	80 to 100 housing units at a density of 8 to 12 dus/ac. An estimated 20 of these housing units could be affordable through participation in a density bonus program; these units would be at a density higher than 12 housing units per acre.
• Site #9:	6 housing units at a density of 4 dus/ac.
• Site #10:	48 housing units at a density of 3 dus/ac.
• Site #11:	32 SRO housing units; 32 market rate dwellings; and 15 work/live-in units.
• Site #12:	200 housing units at an average density of 20 dus/ac. It is anticipated that an application for a zone change/General Plan Amendment will be submitted during the first quarter 1992 for 160 condominiums and 40 affordable apartment housing units.

The analysis of land availability yields the following two conclusions:

- 1. 326 market rate housing units that could be constructed on sites 2, 9, 10, 11 and 12.
- 2. 127 affordable housing units that could be constructed on sites 2, 11, 12 and 20 additional dwellings would be produced through the second unit, inclusionary housing and density bonus programs.

There is a potential for 20 more affordable housing units through the following program endeavors: 5 second units; 10 housing units per the inclusionary housing program; and 5 scattered units per the density bonus program.

GOVERNMENTAL CONSTRAINTS

Section 65583 (a)(4) of the Government Code mandates an analysis of how governmental factors affect the maintenance, improvement and development of housing for all income groups. The relevant legislation cites the following potential or actual constraints:

Land use controls (Land Use Element and Zoning);
Building codes and their enforcement;
Site improvements;
Fees and other exactions;
Local processing and permit procedures.

These factors, which are under the influence or direct control of the City, affect two very important aspects of the housing market: 1) the range and diversity of housing which can be built in the City; and 2) the cost of new housing production. The Statewide legislation does not presume that Solana Beach, or any other City for that matter, regulates these factors in such a way as to restrict housing choices or raise housing costs above normal levels. However, if the analysis does reveal that unnecessary constraints are being imposed then it is expected that efforts will be made to reduce or lessen the impacts.

Land Use Controls

Land Use Element

The 1988 General Plan includes a Land Use Element that incorporates six residential categories providing for a variety of housing types and density ranges. The density ranges are noted below:

Estate: 2 dus/ac
 Low Density: 3 dus/ac
 Low Medium: 4 dus/ac
 Medium: 5-7 dus/ac
 Medium-High: 8-12 dus/ac
 High: 13-20 dus/ac

Each residential land use category is described on the following page.

CHART 2 CITY OF SOLANA BEACH SUMMARY OF LAND USE CONTROLS

RESIDENTIAL ZONE	DUs/ Acre	(F.A.R.) Lot Coverage	Parking Requirements
ER	1-2	.5 for first 5,000 ft. .3 for next 5,000 ft. .15 for additional <20,000	2 spaces
LDR	3	.5 for first 5,000 ft. .3 for next 5,000 ft. .15 for additional <20,000	2 spaces
L/MR	4	.5 for first 5,000 ft. .3 for next 5,000 ft. .15 for additional <20,000	2 spaces
MDR	5-7	.5 for first 5,000 ft. .3 for next 5,000 ft. .15 for additional <20,000	2 spaces
MHR	8-12	.75	Studio: 1 space 1 bdrm.: 1.5 spaces 2+ bdrms.: 2 spaces + 1 guest space per 4 units
HDR	13-20	.75	Studio: 1 space 1 bdrm.: 1.5 spaces 2+ bdrms.: 2 spaces + 1 guest space per 4 units

Source: City of Solana Beach, <u>Draft Zoning Ordinance</u>, 1991.

Residential Zones

At this time, the City in the process of preparing the zoning ordinance. Each major section is being reviewed and evaluated individually by the Citizens Zoning Committee and City Council. Adoption of the final zoning ordinance is expected by early to mid-year 1992. There will be a one to one correspondence between each residential zone and the residential land use categories. Although the City is almost completely built out, the new zoning ordinance will set forth development requirements for: density, parking requirements, lot coverages, setbacks, and other standards. The development standards now under review are summarized in Chart 3.

Text to be added on whether the preliminary standards, if adopted, would impose constraints to the development of housing.

The City also facilitates the expansion of housing development opportunities by mixed-use developments. Recently, the General Plan text was amended for the Light Commercial, Special Commercial and General Commercial land use categories. The adopted text amendments for these categories now read as follows:

"In order to implement the City's Redevelopment Plan, Mixed-Use Concepts of the Highway 101 Vicinity Specific Plan and Housing Element, residential uses are allowed as a secondary use in conjunction with permitted commercial uses. The Zoning Ordinance shall specify limitations as to the relationship of residential to on-site commercial uses."

Building Code and Enforcement

Solana Beach has recently adopted the Uniform Building Code (UBC). The City does not impose any housing standards greater than those contained in the UBC. Therefore, Solana Beach cannot reduce construction costs by revising its building code. In addition, the City has not made any local amendments to State housing law on the model codes.

With regard to new construction, the City's building inspection procedures involve the following: applicants submit proposed plans to the Planning Department and upon approval the building department reviews them.

With respect to housing code enforcement, the City's procedures include the following: The Code Enforcement Division works with property owners and renters to assist in meeting State health and safety codes such as proper plumbing, adequate cooling facilities, screening, etc.

On and Off-Site Improvements

There are 12 sites in the City suitable for residential development. Because of the uniqueness of each site, there are no "standard" site development standards. Development proposed for these sites are carefully evaluated to determine the exact site improvements that must be required to adequately protect public health and safety. Chart 3 presents a summary description of the City's site improvement requirements.

East of I-5 Freeway, the residential areas are fully developed. West of the freeway, there are some scattered vacant sites designated or suitable for residential use. The City's basic requirement is to install the facilities equal to the "as built" standards of adjacent parcels. When streets, curbs, gutters, sidewalks, sewers, water lines and street lighting in the public right-of-way are constructed, they are dedicated to the City which is responsible for maintenance.

CHART 3 CITY OF SOLANA BEACH SUMMARY OF SITE IMPROVEMENT REQUIREMENTS FOR RESIDENTIAL PROJECTS

SITE IMPROVEMENT CATEGORY	DESCRIPTION
Street Widths	5 to 10 foot dedication required to match existing road, no street improvements required unless the adjacent properties are improved and/or the new project is higher density.
Curbing	Required to be installed if adjacent properties have curbs, otherwise improvement is deferred.
Water Connections	At total discretion of local water district (Santa Fe Irrigation District); not controlled by the City of Solana Beach.
	Drought Resistant landscaping encouraged by City.
Sewer Connections	Given small lot sizes in the City, no new septic systems are allowed.
Circulation	No new public roads have been built or required in Solana Beach for at least 5 years, development is almost entirely one end two unit projects on existing small lots.

Source: Director of Community Development; Subdivision Ordinance; Engineering Department.

Fees and Other Exactions

A survey of fees was recently completed by the Construction Industry Federation. The survey results are summarized for each jurisdiction in San Diego County in Tables 10 and 11. Comparing fees between cities are misleading because the nature of the discretionary actions is what generates the kind of fees that would be imposed. To establish comparability between cities, the survey also compared fees for a prototypical home:

A three-bedroom, two-bath single family detached home. 1,800 s.f. (square feet) living area. 400 s.f. garage and 240 s.f. patio. Approximately \$139,000 valuation (calculated by each jurisdiction). Type V wood frame construction. 100A single phase electrical, 100,000 Btu FAU gas service, and a common set of fixtures.

The fees ranged from a low of \$5,908 (Coronado) to a high of \$21,507 (Escondido). The City of Solana Beach ranked near the mid-range with the fees equalling \$14,590. The Solana Beach fees include fees for sewer capacity which are mandated by Joint Power Agreement for the construction, operation and maintenance of the San Elijo Water Pollution Control Facility.

Processing and Permit Procedures

This sub-section presents an analysis of typical permit processing times and standard approval procedures for various development applications. These topics are discussed with reference to the following development applications: Zone changes; General Plan Amendments; Conditional Use Permits; Tentative Parcel Maps; and Final Parcel maps.

Zone Changes

None have been submitted by the private sector in the past five years. A zone change from industrial to residential may be submitted during the first quarter 1992. This zone change application would be expedited because 20% of the housing units would be affordable to very low, low and moderate income households.

General Plan Amendments

None have been submitted by the private sector in the past five years. As noted above, one presently is under serious consideration to convert industrial land (10 acres) to affordable housing. (The City also would assist the project proponent in applying to the State's Rental Housing Construction Program.)

Conditional Use Permits

Presently requires City Council approval — no planning commission or any other discretionary review required — "one stop processing". Proposed zoning changes may allow Planning Director to approve CUPs.

Tentative Parcel Maps

Presently requires City Council approval — no planning commission on any other discretionary review required ("one stop processing").

Final Parcel Maps

Non-discretionary review; if standards met, the Final or Parcel Map will be allowed to record.

TABLE 10
1990/1991 Construction Industry Federation Regional Fee Survey

	Carl	shed Chul	BVISIE CO	ronado Del	Mar El C	alon Encl	MI89 Esco	ndido impe	Heach La	Mesa Lemo	nove Hat	Journ Clu	eenside pow	ay san	Diego San D	Jiego County San	Marcos San	lee Solan	Beach Vist
Certificate of Compliance	\$240/lot	\$231	\$175	\$ 355 + \$500 d	\$100	\$250d	\$225	\$100	\$85	\$25/lot	\$200	\$200	\$1000	\$1000	\$400/lot	\$100	n/a		\$185
Design Review	\$250	\$200 or \$500	\$150	\$180	\$0	\$500, 800 or 1200d	\$100	\$150	\$265	n/a	n/a	n/a	\$225	not provided	\$1850 + 1000d	\$200	.00075003 of BP value + \$450	n√a	n/a
General Plan Amendment	\$1050 or \$2100	\$2000 - 4000 d	\$1000	\$1190	\$750	\$950d	\$474	\$850	\$715	\$300 +\$1000 d	\$490	\$3202, 3949, 5016	\$1000,	not provided	\$1300 + 5560 d	\$ 500 - \$1000	\$1000	\$1700	\$3460
Planned Development		\$2000d PRD \$500d PCD/PID	n/a	n/a	\$400	specific plan	\$3500	\$0	\$0	\$250-400	\$400	n/a	\$1650	\$1850	Subdivision + CUP fees	Subdivision + CUP fees	n/a	n/a	\$140
Rezone	\$260, 790 or 1970	\$2000d	\$1000	\$1190	\$400	1500d	\$250, 750 or \$1875	\$800	\$715	\$300 +\$8/acre	\$640	\$2574 - \$5147	\$1600	\$1750	\$3775 + \$1000d	GPA fees	\$1550	\$1500	\$2410
Site Plan	\$2630 or \$5250	\$150 or \$250	n/a	n/a	\$250	design review	\$1000	\$300	\$265	n/a	\$150	n/a	n/a	n/a	\$1850 + 1000d	\$350 apartments	n/a	\$800	\$1645 com 1545 ind 3395 apt
Special Use Permit (CUP)	\$260	\$1000 - 2000d	\$500	\$715	\$100	\$1700d	\$2500	\$650	\$465	\$375	\$400	\$1238	\$1600	\$1750	\$3700+ \$1000d	. \$350	.00075003 of BP value + \$1130	\$1500	\$2865
Specific Plan	\$1580, 5250, 12600	\$390	n/a	r/a	\$400	\$4000d	\$10K minor \$20K major	\$850	\$715	n/a	\$400	\$2120	varies	not provided	\$18450 d	GPA fees	\$1000	n/a	\$3190
Variance	\$530	\$175	\$300	\$355	\$100	\$400d	\$250	\$180	\$385	\$120	\$350	\$1995	\$275	\$2200	\$1000	\$100	\$500	\$800	\$302
Tentative Parcel Map	\$1580	\$2500d	\$700	\$595+120 /lot +450d	\$500 + \$5/lot	\$700d	\$800	\$550	\$ 440 + \$30/lot	\$875	\$300	\$ 876 +\$49/lot	\$500	\$2200d	\$ 2700 + \$500d	\$300	\$900 ÷ \$100/lot	\$1015	\$925
Final Parcel Map	\$1580	\$2000d	\$300	\$120/lot + \$700d	\$300 +\$5/lot	\$950d	\$1250 +\$20/lot	\$600	\$315	\$1000	\$0	\$400 +\$35lot	\$1000 /sheet	not provided	\$ 5000d	\$100	\$700 ÷ \$20/lot	\$550 + \$20/lot	\$0
Tentative Subdivision Map	\$1050	\$2000d	\$1500	\$1780 + \$500d	\$550	\$2000d	\$1132	\$800d	\$850	\$390	\$700	\$3416	\$1650	\$2200d	\$900 + \$6000d	\$600	\$2000	\$2090	\$3375
Final Subdivision Map	\$2630	\$5000d	\$400	\$1200 + \$700d	\$350	\$950d	\$1450	\$600d	\$1600	\$5000	3% of Improvements	\$750	\$1000 /sheet	\$2200d	\$5000d	\$270	\$900	\$950	\$260
Environmental Initial Study	\$210	\$500d	\$250	\$295	\$100	\$400d	\$750	\$150d	\$220	\$125	\$100	\$1152	\$100	\$1750d	\$900	\$100	\$300	\$0	\$1485
Environmental Impac Report	\$2100	\$5000d	\$1000	\$595 + costs	\$750	cost + 15%	\$2000 or 4000	\$650d	\$1000d	cost + 10%	\$850 + costs	\$6618	cost + 20%	\$5500d	\$5000, 6000 or 9000d	\$1000 + costs	\$1250-2500 +120% costs	costs + 8%	\$900 • 120% costs

TABLE 11
Residential Development Impact Fees as Levied by Jurisdiction

Jurisdiction	Public Facilities		Traffic Mitigation	Sewer	Water	Fire Mitigation	Drainage and Flood Control	Art in Public Places	Parklands	Housing Trust Fund
Carlsbad	3.5% BP value			\$1,825 EDU	\$2,276 EDL		\$2,363 acre	1 10003	\$835	
Chula Vista *	\$1,331 unit	\$1.58 sq ft		\$2,000 EDU	the state of the s	444 444 1144 11			\$1,680	1 11 10 11 10 11 10 1
Coronado		\$1,58 sq ft		\$850 EDU	and the second of the second of the					
Del Mar		\$1.58 sq ft	7 4 4 7		Laws on the property of the sea-	Transport Co. No.				1511711
El Cajon		\$1.58 sq ft				TAME!			\$300	
Encinitas		\$1.58 sq ft		\$2,600 EDU	\$3,165 EDL	\$0.10 sq f	\$0.21 sq ft IS		\$1,763	1 10 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Escondida	\$1,136 unit	\$1.58 sq ft		1	the first transfer of the	ALL MAIN, W. L. V.	\$8,636 acre	\$0.30 **	\$1,731	4 800 MART TO U. VISTO
Imperial Beach		\$1.58 sq ft		\$234 EDU				Control of the second	\$1,100	
La Mesa	78.38.78.	\$1.58 sq ft		\$600 EDU	The street work with the		4 15 3 4 4 5		\$275	A Michigan Day of Alex
Lemon Grove	AMARIA MANAGATAN AMARA	\$1.58 sq ft			Property of the section of	A de Partir - Ar Pareira		1.000 M 100 00 00 00 00 00 00 00 00 00 00 00 00	\$200	As With thirts .
National City		\$1.58 sq ft	The state of the state of the		er i en derskatt. Beningstationer				\$125	
Oceanside	\$503 unit	\$1.58 sq ft	1 1 2 1 20 2	\$1,565 EDU	\$1,095 EDU		\$3,785 acre		\$956	FitchMedal
Poway		\$1.58 sq ft	agents of party and	 A distribution 	lar in the same are	Application of the	\$1,260 acre		\$2,250	3 7 8 8 8 P 1 A
San Diego *	\$2,926 unit	\$1.58 sq ft	**		**	200.00 0.00 0.00			Inc in Pub Fac	
San Marcos	\$5,957 unit	\$1,58 sq.ft	The second secon	\$2,400 EDU		street to retrover, in a con-	\$5,307 acre			
Santee		\$1.58 sq ft	\$178 ADT	\$489 EDU		1 200	\$597 unit		\$3,258	seven Poblik M. Su
Solana Beach	1.0% BP value			\$3,000 EDU	de es s	5000 5441 541 5 1 4 2 5	The state of the s		\$600	hospitative/practice is the
Vista	\$145 unit	\$1.58 sq ft		\$1,731 EDU	*****	177 F 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The second of the second		\$1,253	
Unincorporated	STATE OF THE PARTY NAMED IN	\$1.58 sq ft		\$1,740 EDU		Programme and the second	4 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		\$7,233	gasycovii)

^{*} Chula Vista and San Diego figures represent a weighted average due to significant IntrajurIsdictional differences. The following provides additional detail of fee structures:

Chula Vista (east of 805) \$1,374 unit	\$1.58 sq ft	\$285 ADT	\$2,000 EDU	\$2,700 EDU
Chula Vista (west of 805) \$1,047 unit	\$1.58 sq ft		\$2,000 EDU	\$2,700 EDU
San Diego (Urbanized)	\$1.58 sq ft	\$151 ADT	\$3,865 EDU	\$1,960 EDU
San Diego (Urbanizing) \$5,224 SFD	\$1.58 sq ft		\$3,865 EDU	\$1,960 EDU

** \$0.30 per sq ft, first 1800 sq ft exempted. Key:

BP value – Building Permit Value
ADT – Average Daily Trips
SFD – Single Family Dwelling
EDU – Equivalent Dwelling Unit
sq ft IS – square feet of
Impervious Surface

NON-GOVERNMENTAL CONSTRAINTS

Section 65583 (a)(5) of the Government Code requires that a local housing element incorporate an analysis of potential and actual non-governmental constraints including:

- Availability of financing;
- Price of land; and
- Cost of construction.

Availability of Financing

According to the State Department of Housing and Community Development, the analysis of the availability of financing should consider whether financing is generally available, whether interest rates are significantly different from surrounding areas, and whether there are under-served areas or income groups in the community for new construction or rehabilitation loans. The D/HCD indicates knowledge of this will assist the community to select and implement responsive housing programs such as mortgage revenue bonding, a mortgage credit certificate program, and targeted low-interest rehabilitation loans.

Contact was made with lending institutions to request information available from Home Mortgage Disclosure Act (HMDA) and Community Reinvestment Act (CRA). This information was unavailable from these institutions for inclusion in the Preliminary Draft Housing Element. However, these data will be included in the draft report transmitted to the State Department of Housing and Community Development.

Table 12 contains information on the mortgage payments due on various loan amounts at interest rates ranging from 10% to 15%. As shown, climbing interest rates have a dramatic affect on the affordability of a given mortgage amount. Below market rate financing enhances the ability to afford housing by low and moderate income households.

Article 34

Article 34 of the State Constitution requires local referendum authority before a state public body can, in any manner, develop, construct, or acquire certain types of low-rent housing projects in a community. This referendum process can act as an impediment to the development of some affordable housing developments. Article 34 states, in relevant part:

"No low rent housing project shall hereafter be developed, constructed, or acquired in any manner by any state public body until, a majority of the qualified electors of the city, town, or county, as the case may be, in which it is proposed to develop, construct, or acquire the same, voting upon such issue, approve such project by voting in favor therefore at an election to be held for that purpose, or any general or special election."

In effect, an Article 34 referendum is required if three narrowly-defined factors are found to exist: (1) a state public body (including a city or county) which (2) develops, constructs, or acquires (3) a low-rent housing project. If any one of the three factors is not present, Article 34 is not applicable. As "affordable housing" developments are proposed in the City, an evaluation of Article 34 requirements should be made.

TABLE 12	
MONTHLY MORTGAGE PAYMENTS	5 *
(ROUNDED TO THE NEAREST DOLLA	AR)

Loan Amount	10%	11%	12%	13%	14%	15%
\$75,000	\$658	\$714	\$771	\$830	\$889	\$948
\$100,000	878	952	1,289	1,106	1,185	1,265
\$125,000	1,097	1,143	1,287	1,383	1,481	1,581
\$150,000	1,136	1,333	1,544	1,659	1,777	1,897
\$175,000	1,536	1,524	1,801	1,936	2,074	2,214
\$200,000	1,755	1,714	2,058	2,212	2,370	2,630

^{*}Assumes a 30-year, fixed-rate loan.

Price of Land

Prevailing land costs in the City make the development of affordable housing, without subsidies, financially impractical. Many of the sites suitable for residential development are located along the "101" corridor. Commercial land in this corridor commands sales prices of \$40 per square foot. In residential zones, existing ocean view cottages on 50' x 100' lots are selling for \$1 million a lot. Since each of the 11 sites identified in the land inventory are unique, it is not possible to present average per acre land costs; however, it is estimated that the land costs would exceed the range for providing affordable housing without a subsidy of some nature or a significant increase in permitted development density.

Cost of Construction

Construction costs are the second highest cost component of new housing. Construction costs are the total cost to the developers exclusive of profit, but including fees, materials, labor and financing. These costs vary depending on the size, roofing materials, carpeting and other features. Because of this, it is difficult to establish an absolute measure of construction costs. The Community Development Department estimates that market-rate construction costs average \$60 to \$70 per square foot. Frequently, these average costs are exceeded by new infill development in the City.

Housing Costs

Non-governmental constraints include housing costs. New housing construction in the City is limited. Moreover, the City has a low turnover rate (based on the years of residency in the community). As a result, resale activity is probably limited in the City. Table 13 reports on the "average" cost of resale homes in Solana Beach in comparison to other communities in San Diego County. Only Del Mar and Coronado have average resale costs higher than Solana Beach.

Additional housing value and cost data are available from recently published 1990 Census information. Table 14 reports on the value of owner-occupied housing as of April 1990. As noted in that table, only 9% of the owner-units had an estimated value of less than \$200,000. Clearly the existing housing market offers few opportunities for homeownership by first-time buyers. Very large subsidies by way of deferred second trust deeds, for example, would be necessary in the resale market to enable first time buyers to become homeowners.

The distribution of contract rents is shown in Table 14. Almost 6 out of every 10 renter units had monthly rents of more than \$750. An estimated 10% of the rental supply had monthly costs of less than \$500. Thus, the rental housing supply offers more affordable housing costs.

TABLE 13 MEDIAN COST OF RESALE HOMES REGIONAL HOUSING NEEDS STATEMENT SAN DIEGO REGION JANUARY 1990

North County Coastal	MedianNorth County Inland		
Solana Beach	\$388,000		
Carlsbad	290,000	Escondido	\$170,000
Del Mar	475,000	Poway	168,000
Encinitas	279,500	San Marcos	155,000
Oceanside	151,000	Vista	180,000
East County		South Bay	
El Cajon	179,500	Chula Vista	156,500
La Mesa	215,000	Imperial Beach	147,000
Lemon Grove	139,500	National City	117,000
Santée	150,000		
San Diego*	\$90,000-590,000	Unincorporated* \$125	5,000-1,395,000
Coronado	460,000		

^{*}Ranges (low-high) reflect the median housing cost of resale homes by communities.

Source: San Diego Union, February 25, 1990 - January Home Resales in San Diego

County

TABLE 14
CITY OF SOLANA BEACH
VALUE OF OWNER-OCCUPIED HOUSING — 1990

Value	Number of Units	Percentage Distribution
< \$200,000	248	9.0%
\$200,000 - \$249,999	299	10.9%
\$250,000 - \$299,999	292	10.6%
\$300,000 - \$399,999	745	27.2%
\$400,000 - \$499,999	535	19.5%
\$500,000 or more	625	22.8%
	2,744	100.0%

Source: 1990 Census of Population and Housing.

Table construction by Castañeda & Associates.

TABLE 15
CITY OF SOLANA BEACH
DISTRIBUTION OF CONTRACT RENTS — 1990

Contract Rent	Number of Units	Percentage Distribution
< \$500	208	10.3%
\$500 to \$549	128	6.4%
\$550 to \$599	112	5.6%
\$600 to \$649	121	6.0%
\$650 to \$699	141	7.0%
\$700 to \$749	124	6.1%
\$750 to \$999	572	28.4%
\$1,000 or more	609	30.2%
	2,015	100.0%

Source: 1990 Census of Population and Housing.
Table construction by Castañeda & Associates.

SPECIAL HOUSING NEEDS

The City's Housing Element must include:

"Analysis of any special housing needs, such as those of the handicapped, elderly, large families, farmworkers, families with female heads of households, and families and persons in need of emergency shelter."

HOUSING INDICATORS/SPECIAL NEEDS

Elderly

The State Department of Finance estimates the City's population to be 13,024 as of January 1991. According to the 1990 Census, 22.2% of the City's households are 65 years of age or older. About 77% of all senior households are homeowners (see Table 16 below). It is assumed that most of the senior homeowners do not experience financial assistance needs. Senior renters in the City would experience rental assistance needs, however. In this context, it may be appropriate for the City to encourage forms of rental assistance in addition to the Section 8 program.

TABLE 16 CITY OF SOLANA BEACH AGE OF HOUSEHOLDER BY TENURE — 1990

Age of Householder	Owner Occupied	Renter Occupied	Total Households	Percentage Disrtribution
15 to 24	34	274	308	5.6%
25 to 34	307	649	956	17.4%
35 to 44	717	518	1,235	22.5%
45 to 54	780	252	1,032	18.8%
55 to 64	621	123	744	13.5%
65 to 74	619	130	749	13.6%
75 years +	320	151	471	8.6%
	3,398	2,097	5,495	100.0%

Source: 1990 Census of Population and Housing.

Table construction by Castañeda & Associates.

Handicapped

The information on handicapped housing needs is difficult to obtain. The census data are limited to work/transportation related disabilities. The Department of Health and Human Services estimates that 10% of the total population in the United States is handicapped. Applying the national figures to the City's 1991 population would result in an estimate of 1,302 handicapped persons.

The Federal Rehabilitation Act of 1973, Section 104.3(j) defines a disabled person as "any individual who has a physical or mental impairment which substantially limits one or more major life activities, has record of such an impairment, or is regarded as having such an improvement". The State Department of Rehabilitation was contacted to determine whether that agency maintains city specific data on handicapped persons. The State Department staff indicated that assumptions could not be made from their client base as it represents only a portion of the handicapped individuals in each community. The Rehabilitation Department provides vocational rehabilitation to disabled youths and adults. The client base changes frequently and their housing needs vary greatly, depending on the disability. That agency also suggested a guideline of approximately 10% handicapped in any given population.

The State Rehabilitation Institute was contacted regarding handicapped data. That agency provides out-patient rehabilitation and adult daycare. No data are kept on a city specific basis.

In 1985, the State of California adopted building regulations that required any privately funded development with five or more units of multi-family rental housing to include handicapped adaptability features for all accessible (ground floor) units. Until 1989, developers could apply for a hardship exemption if a maximum of \$650 per unit was spent in adapting units for handicapped access. Many developers applied the required funds to only one aspect of accessibility, such as an exterior ramp, but failed to take into account interior design. Required interior and exterior modification usually cannot be accomplished at a cost of \$650 per unit.

Last year, Title 24 of the California Code of Regulations was amended to repeal the cost cap. It is now more difficult to obtain a hardship exemption. The developer must show that the handicapped requirements cause the project to become financially infeasible or must prove that the modifications would necessitate the removal of major structural elements.

Family/Large Households

Large households are defined as those households with five or more persons. Data from the 1989 "Public Opinion Survey" indicates that 5.7% of the households had five or more persons. Applying this percentage to arrive at a 1991 estimate would result in 314 large households.

In 1990, Solana Beach had 5,495 total households, of which 375 were large households, accounting for 6.8% of the City's total households. The number of large households has declined over the decade. Large households experienced a need for more space at affordable housing costs. This particular need is experienced by large family renter households. About 46% of all large family households resided in renter-occupied dwellings as of April 1990.

TABLE 17
CITY OF SOLANA BEACH
HOUSEHOLD SIZE DISTRIBUTION — 1990

Household Size	Owner Occupied	Renter Occupied	Total Households	Percentage Disrtribution
1	783	739	1,522	27.7%
2	1,477	714	2,191	39.9%
3	507	286	793	14.4%
4	428	186	614	11.2%
5+	203	172	375	6.8%
	3,398	2,097	5,495	100.0%

Source: 1990 Census of Population and Housing.

Table construction by Castañeda & Associates.

Farmworkers

According to SANDAG's <u>Regional Housing Needs Statement</u>, the housing needs of farm workers represents another important category that has an impact upon the availability of housing especially for low income housing. The special needs of this group are not expressed as broadly as other special housing groups because: (a) the farm worker is often a migratory laborer who has not established a permanent legal residence; and (b) a substantial number of undocumented aliens perform agriculture related activities. Thus, according to SANDAG, the farm workers are provided the least habitable housing as well as the lower level of priorities when housing needs of special groups are being addressed.

The migrant homeless population is significant in the North County area, where the county estimates there are approximately 12,000 people living mostly in the hills and canyons. SANDAG also reports that, in addition to a growth in flower and foliage production, fruit production has experienced a rapid expansion in San Diego County over the past decade. Moreover, the work force involved was so largely-undocumented prior to employer sanctions taking effect (December 1, 1988) that 10-year-old Census numbers are not reliable indicators to gauge farmworking housing needs.

In 1980, the Agriculture/Forestry/Fisheries and Mining industries accounted for 3.1% of the City's total work force. SANDAG estimates show that in 1988 the City had approximately 4.1% of its workforce employed in these industries. Based on an average of 1.5 employed persons per household, there is an estimated 200 households in the City whose principal wage earners work in the "farming industries." These permanent households already would have been counted in the estimate of current needs and projections of future needs. Although these "farm-workers" reside in Solana Beach, they work outside in other locales. The only "agriculture" employment source within the City is a 16-acre site in flower production. This "farm" is family owned and operated and does not generate any jobs for other persons residing in the City. Recent communication with owners indicates they have decided to pursue residential development of approximately 9.75 acres of the property.

Single-Parent/Female Headed Households

The housing needs of single-parent households have increased in recent years. The most significant portion of this group is the female-headed households. In 1980, the City had 312 female-headed households with one or more children, accounting for 6.2% of the City's total households.

Data on this socio-economic characteristic are available from recently published 1990 Census information. Of the City's total households (5,495), 1,542 or 28% were headed by a female. The distribution of these households is listed below:

\checkmark	1 person female householder	845
1	2 person family female householder	405
	with related children: 234	
	with no related children: 171	
$\sqrt{}$	Nonfamily female householder	<u>292</u>
		1,542

Site identification became a requirement, effective January 1, 1988, or the next periodic update of the housing element pursuant to Government Code Section 65588, whichever is later. Housing element law requires an "identification of adequate sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate the development of emergency shelters and transitional housing" (Government Code Section 65583 (c)(1)).

According to the D/HCD, localities should use the Uniform Housing Code (UHC) Space and Occupancy Standards, which apply to shelters. These standards specify, for example, that sleeping accommodations for 2 persons require a minimum of 70 square feet of space and an additional 50 square feet of space for each additional person.

Any of the following could meet the adequate sites requirement for a need of no more than 10 to 20 persons: apartments, mobilehomes, recreational vehicles with hook-ups, units in a single-room occupancy structure (SRO), a large single-family unit, church facilities, commercial, or other multi-use facilities.

For a need greater than 20 persons, one or more of the following strategies would satisfy the site requirements; a program to help increase the capacity of existing shelters; identification of suitable structures such as warehouses, schools, or hotels that could be used as, or converted to, shelters; identification of specific sites which have the potential for shelter or transitional housing development during the planning period of the housing element (e.g., sites identified in a shelter ordinance); or establish a shelter-transitional housing zone or zones.

Homeless

According to the Technical Assistance report prepared by the State Department of Housing and Community Development, a needs assessment includes:

- 1. An estimate or count of the daily average number of persons and families in the locality lacking permanent shelter.
- 2. A count of the number and type of shelter beds, hotel/motel vouchers, and units of transitional housing currently available in the locality.
- 3. An estimate derived from the figures described above of the number of additional shelter beds, shelters, and transitional housing units needed by type of need.

With regard to #1, there is an average of two to three homeless persons per week in Solana Beach. Thus, it is estimated the daily average number of persons lacking permanent shelter is less than one.

Currently, there are zero shelter beds and units of transitional housing available in the City. It may be possible that homeless persons in Solana Beach have been served by FEMA — the Federal Emergency Food and Shelter Program. This program has a Shelter/Voucher component.

There is no need for additional facilities in the City. The City will develop an information and referral capability to inform any homeless persons of the services provided within the City by nonprofit organizations and/or the FEMA program. Additional data on this special needs group are provided in the following three paragraphs.

The homeless population in the San Diego Region is estimated to be 5,000 people, with 3,000 located in the downtown San Diego area, according to statistics compiled by the Regional Homeless Task Force. This same source estimates that 18% of the homeless spend the evening at an emergency shelter operated by public or private agencies; 40% are doubled-up with others such as acquaintance or relatives; and 42% sleep outside. Based on these data it may be assumed that about 800 to 900 homeless persons sleep outside in jurisdictions other than the City of San Diego.

In North County, there is overlap between the special needs groups of the homeless and farmworkers. According to SANDAG, the farmworker is often a migratory laborer who has not established a permanent residence and a substantial number of undocumented aliens perform agriculture related activities. In the North County, there is considered to be a migrant homeless population.

In the 1988 Housing Element, the Community Development Department estimated that there were two to three visible homeless persons on average per week that were observed in the City. These homeless persons were transients and did not create a need for permanent or temporary shelter facilities.

The Community Resource Center, located in the adjacent City of Encinitas, provides a variety of social services to its client population. Based on statistics gathered by clients receiving services at the Community Resource Center from February 1991 through May 1991, there were eight homeless clients. In addition, there are no church or other agency sponsored programs that attract homeless persons to the City.

In summary, the homeless situation with regard to transient individuals remains the same as 2-1/2 years ago. The statistics indicate that a shelter is not required to accommodate the need.

Besides the transient homeless there are individuals and families who are "about to be homeless" due to sudden income loss; possible evictions; and family disruption. In instances when the "about to be homeless" contact the City the staff refers the persons to social service and housing assistance providers. For immediate needs, such as food and clothing, the individuals are referred to the Community Resource Center; for housing assistance the persons are referred to the County's Housing and Community Development Department for possible availability of Section 8 rental assistance.

Summary of Existing Resources and Unmet Needs

Elderly

There are 281 senior renters living in Solana Beach. Since some of these households are paying more than they can afford for housing, there is a need for financial assistance. It is assumed that 50% of senior renters would be "overpaying" — about 140 households. Existing resources to meet these needs include the Section 8 rental assistance program. There are no monies available from either the General Fund or CDBG funds to supplement the needs met by Section 8. Currently 25 households (senior and non-senior) are assisted by the Section 8 program. Therefore, there is an unmet need of 120+ senior households. It is possible that a portion of this need could be met by a seniors home sharing program.

There are an estimated 471 senior households 75+ years old (320 owners and 161 renters). Some of these seniors could be "frail" elderly who are in need of a supportive housing environment such as congregate care housing, nursing homes or convalescent housing. These needs would be difficult to meet through new construction because of the scarcity of land and other competing needs such as for SRO and family housing.

Handicapped

The handicapped population varies greatly, from those with physical handicaps to developmentally disabled. The City enforces the Title 24 building regulations that mandate handicapped adaptability features. In addition, the City's new zoning ordinance will include provisions for regulating the location of group homes. These land use regulations will encourage group homes and a 25% density bonus. Dial-A-Ride transportation shuttles, bus turnouts and on-site recreation facilities are encouraged. Present zoning requires Council approval.

Large Family Households

According to the 1990 Census, the City has about 172 large family renter households. These households experience a need for more space at affordable costs. It is estimated that about 50% of these households experience financial assistance needs. As noted, the Section 8 program is the only program that bridges the affordability gap of these existing households. The unmet needs of this special group are estimated to range between 50 and 80 households.

Other large family renter households may need additional space; however, property owners would need to apply for financial assistance. In cooperation with the San Diego Housing Authority, the Housing Rehabilitation Program includes a rental rehabilitation program. Under the provisions of this program, funds are available to qualifying owners of rental property for the rehabilitation of these units.

In addition to these programs, the City will prepare a density bonus ordinance. That ordinance will include an evaluation of enacting provisions to grant density bonuses to developers that build units which can accommodate the needs of large families.

Farmworkers

The Migrant and Amnesty Education Program staff has estimated that there are 25 migrant families residing in Solana Beach; the majority live in the Eden Gardens area of the City. With respect to housing, the most prevalent needs would appear to be: affordability; space; and standard shelter The City's current program efforts include rental assistance and housing rehabilitation. The City has encouraged the use of these programs by residents of the Eden Garden area by distributing flyers of the programs in both English and Spanish.

Other resources to address the needs of farmworker households include the State Farmworker Housing Grant Program. This program provides owner-occupied and rental units for low-income agricultural workers. The City will inform nonprofit corporations of the availability of this program.

Female Heads of Household

About 28% of the City's households are headed by a female. More than one-half of all female householders live alone. The housing needs include: general access to all types of housing; affordable rental housing; and locations close to employment and services such as child care.

Homeless

There are an average of two to three homeless persons per week in Solana Beach. It is estimated that the average daily number of persons lacking permanent shelter is less than one. There is no need for additional facilities in the City as existing resources can respond to the need.

ENERGY CONSERVATION OPPORTUNITIES

An analysis of opportunities for energy conservation with respect to residential development is required by Section 65583 (a)(7) of the Government Code. According to the D/HCD:

"The purpose of this analysis is to show that the locality has to consider how energy conservation might be achieved in residential development and how energy conservation requirements may contribute to the affordability of units.

Following are examples of local policies, plans, and development standards that have been successful in reducing energy costs or consumption:

- promotion of compact, higher density, and infill development;
- the active, constructive enforcement by local building officials of existing state residential energy conservation standards;
- standards for street widths, landscaping of streets and parking lots to reduce heat loss or provide shade; and
- standards for energy efficient retrofits to be met prior to resale of homes." The State Office of Planning and Research (OPR) has offered the following advice on this code requirement:
 - Opportunities in the design and construction of individual units.
 - Opportunities in the design of subdivisions.
 - Assessment of the effect of energy conservation measures on the cost of housing in the long run.
 - Proximity of proposed residential development to employment centers, schools and other services and availability of transit services.

Because of the limited projected new dwelling unit growth of the City of Solana Beach, a large scale program of energy conservation with respect to residential development is not considered necessary. However, the City will enforce the State's energy conservation regulations on all new dwelling units. Special attention to energy conservation opportunities also will be given to any large-scale residential developments that may be proposed in the future

Appropriate energy conservation goals and policies are stated in the conservation and open space element. These are listed below:

Objective 7.0

Reduce the City's demand upon conventional, non-renewable sources of energy.

Policy 7.a

The City shall require new developments to incorporate energy conservation measures and promote alternative energy systems.

In addition, the City's mixed-use commercial/residential project and commuter rail station will contribute to the OPR advice of placing job opportunities/housing/transportation in close proximity to one another.

ASSISTED HOUSING AT RISK OF CONVERSION TO MARKET RATE HOUSING

The City does not have any Section 236 assisted housing at risk of conversion to market rate housing. This conclusion is reached following a review of the "Inventory of Federally Subsidized Low-Income Rental Units at Risk of Conversion" as prepared for the California Housing Partnership Corporation by the California Coalition of Rural Housing.

There are two apartment projects located in Solana Beach that have a portion of the units setaside at rent levels restricted to low income households:

- Coastal Commission has fostered an affordable apartment building located at 679-691 Valley Avenue. Under contractural obligation, the private property owner, County Housing Authority and State HCD have agreed to hold 24 units at rents which are set at 30% to 80% of median income adjusted for family size.
- <u>Density Bonus</u>—a 79-unit apartment complex was developed at 805/ Valley Avenue, setting aside 32 units for low income seniors.

The agreements for these two projects are scheduled to terminate in the years 2001 and 2002. Thus, the affordable units in the projects are not at risk of conversion within the five year time frame of this Element. Nevertheless, the City recognizes the continued importance of this housing and the need to preserve their affordability. A program to prevent conversion of these units to market rate housing may be developed within the time frame of this Element.

INTRODUCTION

Section 65583 (b) of the Government Code requires:

"A statement of the community's goals, quantified objectives, and policies relative to the maintenance, preservation, improvement, and development of housing."

The following definitions, developed by HCD, provide guidance on the meanings of these terms:

"Goals are general statements of purpose. Housing element goals will indicate the general direction that the jurisdiction intends to take with respect to its housing problems. While reflecting local community values, the goals should be consistent with the legislative findings (Section 65580) and legislative intent (Section 65581) of Article 10.6 and other expressions of state housing goals contained in the housing element law. Goals may extend beyond the time frame of a given housing element.

<u>Policies</u> provide a link between housing goals and programs; they guide and shape actions taken to meet housing objectives.

Quantified objectives are the maximum actual numbers of housing units that the jurisdiction projects can be constructed, rehabilitated, and conserved over a five-year time frame. In order to more realistically plan for the implementation of housing programs, it is useful for localities to establish objectives for each housing program which will be implemented during the time frame of the element. Objectives may therefore be short-term in outlook compared to community's goals."* (emphasis added)

^{*} State Department of Housing and Community Development, <u>Questions and Answers</u> Report, (June 1987) p. 10.

BACKGROUND

There are four major sources for determining the goal, policies and objectives appropriate for Solana Beach:

- Consistency with the State legislature's findings and intent for local housing elements.
 Housing needs that must be addressed by local housing program strategies.
- Local community values expressed in the housing-associated statements found in the General Plan, 1988 Housing Element, and 1989 Public Opinion Survey.
- Housing needs, resources and constraints pertinent to existing and future conditions in Solana Beach.

Legislative Findings and Intent

According to Section 65580 of the Government Code, the California legislature made the following *findings:*

- "(a) The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order.
- (b) The early attainment of this goal requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.
- (c) The provision of housing affordable to low- and moderate-income households requires the cooperation of all levels of government.
- (d) Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.
- (e) The Legislature recognizes that in carrying out this responsibilty, each local government also has the responsibility to consider economic, environmental, and fiscal factors and community goals set forth in the General Plan and to cooperate with other local governments and the state in addressing regional housing needs."

The legislative *intent* for the preparation of Housing Element's is declared in Section 65581 of the Government Code:

- "(a) To assure that counties and cities recognize their responsibilities in contributing to the attainment of the state housing goal.
- (b) To assure that counties and cities will prepare and implement housing elements which, along with federal and state programs, will move toward attainment of the state housing goal.
- (c) To recognize that each locality is best capable of determining what efforts are required by it to contribute to the attainment of the state housing goal, provided such a determination is compatible with the state housing goal and regional housing needs.
- (d) To ensure that each local government cooperates with other local governments in order to address regional housing needs."

Housing Program Strategies

Another foundation for the goal statements are the goals that a local housing program must accomplish. These are stated below:

- √ Identify adequate sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate and encourage the development of a variety of types of housing for all income levels.
- Assist in the development of adequate housing to meet the needs of low- and moderate-income households.
- Address and, where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing.
- $\sqrt{}$ Conserve and improve the condition of the existing affordable housing stock.
- √ Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, or color.

Community Goals and Values

The 1988 General Plan and Housing Element provided the City with the first opportunity to establish community goals for housing conservation, improvement and production. A major, significant consideration of the City is to achieve a balanced distribution of land uses to ensure that enough revenues over time are generated to pay for services at current or enhanced standards. The land use plan was adopted in light of this objective as well as the need to ensure neighborhood compatibility. Because of the limited vacant land available, a focus of the 1988 Housing Element was on the conservation of affordable housing and improvement of the existing stock. Another major consideration of the Housing Element was to establish the foundation for future housing actions through creation of a redevelopment agency and a zoning ordinance that reflected local conditions and needs.

In May 1989, a "City of Solana Beach Public Opinion Survey" was completed by the San Diego Association of Governments. Surveys were mailed to 4,000 Solana Beach residences that were randomly selected from a city-wide list of addresses. Initial and follow-up procedures resulted in a total response rate of 36%. Almost 80% of the respondents owned their homes and 45% had lived in the community more than 10 years. The respondents indicated that what they liked most about Solana Beach was the "beach-ocean" and "small town, rural atmosphere". With regard to community needs, about 52% of the respondents cited either "reduce traffic" or "control/manage growth". Another 16.5% of the respondents cited the need to "redevelop the Highway 101 commercial area".

The public opinion survey offers the following insights for the Housing Element Update:

The vast majority of residents are long-time homeowners; therefore, they would not qualify for rental assistance and/or first-time buyer programs.
 There is a high degree of interest in improving the physical image of the City as observed from the "101" corridor.
 The need to improve the existing housing stock was not regarded as a significant need in the City.
 The respondents did not express opinions on the need for affordable housing.

1991 Housing Needs, Resources & Constraints

The City's housing policy statements are shaped not only by the Statewide legislative mandates and community goals, but also by existing and future housing needs as well as prevailing resources and constraints. Highlights of these factors are summarized below:

- Housing stock improvement needs are important, but not extensive: an estimated 25 housing units are in need of rehabilitation and another 5 need replacement.

 Conservation of the existing housing stock is very important in light of the limited potential to add to this stock on vacant residential land.

 Preservation of existing assisted housing is a new requirement of local elements and was not a factor considered in the 1988 Housing Element. Consequently, goals, policies, objectives, and programs must be established in this area.
- New development needs are significant since construction at this level would deplete to zero the amount of vacant land remaining in the City.

QUANTIFIED OBJECTIVES

According to State law, numerical targets must be set forth in a housing element with regard to:

- Conservation
- Preservation
- Rehabilitation
- Construction

Chart 4 summarizes the Housing Element quantified objectives, policies and program actions. For each quantitative objective, there are a series of policies stated which would serve to achieve the target. Moreover, the program actions that would achieve the policies are enumerated. In Section 5, each Program Action is explained in greater detail. Briefly, the quantitative objectives are listed below:

- Conservation = 25 Section 8 units plus existing affordable housing stock.
- Preservation = 56 affordable units in two apartment projects.
- Rehabilitation = 10 substandard units suitable for rehabilitation in five years.
- Construction = 216 new housing units for all income groups in five years.

The income group objectives match the Regional Housing Needs Statement and could be accomplished as follows:

Income Group	Quantified Objective # of Housing Units
Very Low	50; to be produced by 32 SRO units + 18 housing units at Site 12.
Low	37; to be produced by 15 work/live-in units + 22 housing units at Site 12.
Moderate	45; to be achieved through both affordable and market rate development.
Above Moderate	84; to be produced by market rate development at various sites.

CHART 4 CITY OF SOLANA BEACH: OBJECTIVES, POLICIES AND PROGRAM ACTIONS

Objectives	Policies	Program Actions
1. Achieve construction of 216 new housing units for all income groups between July 1, 1991 and June 30, 1996.	1.1 Implement the land use plan which provides for a minimum of 1,273 residential acres.	1.1.1 Zoning and Development Standards 1.1.2 Public Services and Facilities
	1.2 Provide opportunities for development of a full range of housing styles, locations and densities.	1.2.1 Variety of Housing Types
	1.3 Minimize the impact of the City's development processing on new housing production costs.	1.3.1 Housing Production Incentives 1.3.2 State and Federal Housing Programs
	1.4 Participate in State and Federal programs to provide additional rental housing units.	1.4.1 State and Federal Housing Programs 1.4.2 Housing Financial Assistance
2. Achieve the development of 67 to 87 affordable units between July 1, 1991 and June 30, 1996. (The affordable units are part of the 216 total and	2.1 Use the Affordable Housing Fund to address a variety of housing needs.	2.1.1 Housing Financial Assistance
would serve very low and low income house-holds.)	2.2 Include a full range of housing types in the implementation of programs that encourage the development of affordable housing.	2.2.1 Housing Production Incentives 2.2.2 State and Federal Housing Programs
	2.3 Support the efforts of non-profit organizations, county housing authority, citizens and private developers in the development of affordable housing.	2.3.1 Housing Financial Assistance 2.3.2 State and Federal Housing Programs
	2.4 Adopt an ordinance requiring projects of ten or more units to include 10% affordable units or pay a fee in lieu of the inclusionary requirement.	2.4.1 Housing Financial Assistance

CHART 4 CITY OF SOLANA BEACH: OBJECTIVES, POLICIES AND PROGRAM ACTIONS

Objectives	Policies	Program Actions
3. Rehabilitate 10 dwelling units during 1991- 1996 housing program period.	3.1 Provide adequate municipal services necessary for the maintenance and upkeep of the existing supply.	3.1.1 Public Services and Facilities
	3.2 Encourage the continued high maintenance levels of the housing stock.	3.2.1 Structural Conservation
	3.3 Enact codes and ordinances that will serve to correct substandard premise and structural conditions.	3.3.1 Structural Conservation
	3.4 Participate in appropriate State and Federal housing programs.	3.4.1 State and Federal Housing Programs
4. Conserve 25 affordable Section 8 housing units in the existing stock and conserve the existing affordable rental housing supply.	4.1 Assure that a mobile home park closure impact report is compiled, as necessary. (Note: a closure report and Plan for the one remaining MHP was prepared and approved by the County of San Diego before City incorporation.)	4.1.1 Zoning and Development Standards
	4.2 Continue participation in the Section 8 rental assistance program.	4.2.1 Affordability Conservation
	4.3 Only approve condominium conversion applications when there is a rental vacancy rate in excess of 5%.	4.3.1 Affordability Conservation
5. Preserve 56 affordable, density bonus units in two apartment developments (approved by the County and Coastal Commission and now a part of the incorporated City.)	5.1 Encourage the retention of the existing affordability controls for density bonus units.	5.1.1 Housing Preservation

Quantified objectives need not match exactly housing need. According to Section 65583(b) of the Government Code:

"It is recognized that the total housing needs identified pursuant to subdivision (a) may exceed available resources and the community's ability to satisfy this need within the content of the general plan requirements outlined in Article 5 (commencing with Section 65300). Under these circumstances, the quantified objectives need not be identical to the identified existing housing needs, but should establish the maximum number of housing units that can be constructed, rehabilitated, and conserved over a five-year time frame."

The quantitative objectives for rehabilitation is less than the need because there may be insufficient funding to support improvement of all substandard housing. Rather than state an objectives that may be financially unattainable, the City has chosen a target that has a reasonable expectation of being achieved and represent the maximum feasible number of units to be rehabilitated. With regard to new affordable housing, the quantitative objective is 67 to 87 units. Once again, there is a reasonable expectation that 67 housing units can be built; however, the development of 87 dwellings is more difficult due to financial and land constraints and the need to put in place other implementation actions.

INTRODUCTION

According to Section 65583(c), the housing element must include:

"A program which sets forth a five-year schedule of actions the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the housing element through the administration of land use and development controls, provision of regulatory concessions and incentives, and the utilization of appropriate federal and state financing and subsidy programs when available and the utilization of moneys in a Low and Moderate Income Housing Fund of an agency if the locality has established a redevelopment project area pursuant to the Community Redevelopment Law. In order to make adequate provision for the housing needs of all economic segments of the community, the program shall" ... address specific needs.

PROGRAM SUMMARY

Action programs must be set forth in six specific need areas:

1. Section 65583(c)(1) states that a local housing element must:

"Identify adequate sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate and encourage development of a variety of types of housing for all income levels, including rental housing, factory-built housing, mobilehomes, emergency shelters and transitional housing in order to meet the community's housing goals as identified in subdivision (b)."

2. Section 65583(c)(2) of the Government Code mandates that a housing program shall:

"Assist in the development of adequate housing to meet the needs of low and moderate income households."

3. Section 65583(c)(3) states that a local housing element must:

"Address and, where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing."

4. Section 65583(c)(4) states that a housing program shall describe actions to:

"Conserve and improve the condition of the existing affordable housing stock."

5. Section 65583(c)(5) requires that the housing program:

"Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, or color."

6. Section 65583(c)(6) mandates that the housing program shall do the following:

"Preserve for lower income households the assisted housing developments... The program for preservation of the assisted housing development shall utilize, to the extent necessary, all the available federal, state, and local financing and subsidy programs except where a community has other urgent needs for which alternative funding sources are not available. The program may include strategies that involve regulations and technical assistance."

ADEQUATE HOUSING SITES

Chart 5 graphically conveys the City's action programs for ensuring "adequate housing sites" during the 5-year Housing Program. The entire program encompasses three programs: zoning and development standards; public services and facilities; and variety of housing types.

State law provides guidance for how housing programs must be described. The law states that:

"The program shall include an identification of the agencies and officials responsible for the implementation of the various actions . . . " In addition, the program must explain the funding source, time table for implementation, and any quantified objectives.

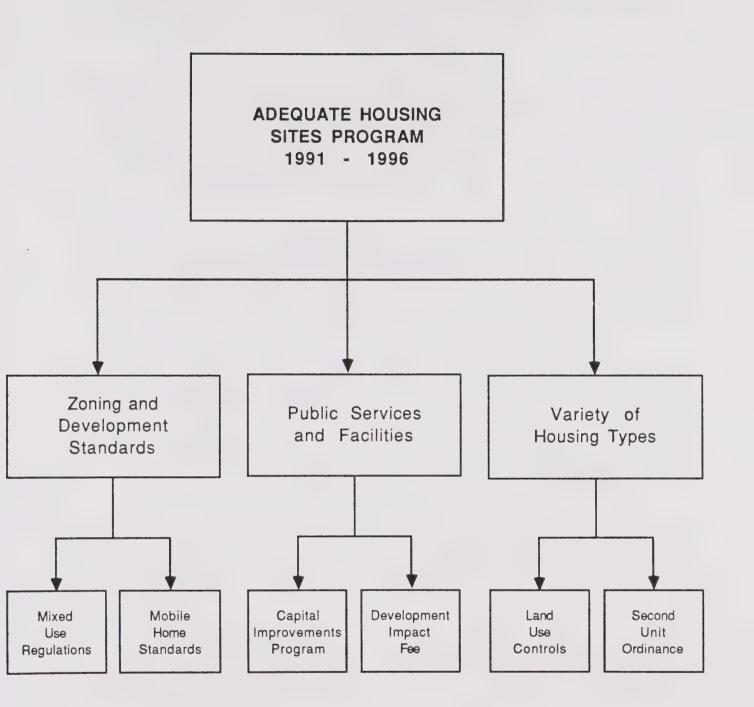
Each program is described in the following paragraphs.

Zoning and Development Standards

Mixed-Use Regulations

Program Description: The City has adopted a Redevelopment Plan which calls for consideration of appropriate zoning ordinances which would allow mixed-use residential/commercial development in appropriate areas. The City Council will consider including development standards, policies, and procedures to mixed-use residential/commercial projects in the special commercial zone and in the 101 Corridor Specific Plan. The goal of the mixed-use residential/commercial development will be to provide affordable housing opportunities within the commercial areas of the City. In furtherance of the policies previously established in the Redevelopment Plan, the City is now in the process of processing a site development plan for a mixed-use commercial/residential project and commuter rail station on a 10-acre site located at North Cedros Avenue. This site is located with the Redevelopment Project area. The mixed-use regulations will enable the development of 32 affordable SRO units and 15 work/live-in units within the proposed transit center project as conditionally approved.

Responsible Agency: Staff input to the mixed-use/affordable housing development is being provided by the Community Development Department and Redevelopment Agency.



Implementation Schedule: Final approval of the site development plan by the City Council is expected by July 1991. Groundbreaking on the project is now scheduled to occur by 1992/1993. The affordable SRO and live-in units are anticipated to be completed and ready for occupancy by 1993. The special commercial zone and 101 Corridor Specific Plan are scheduled for adoption in late 1991.

<u>Quantified Objective</u>: 32 affordable SRO units and 15 work/live in units within the transit center project. There is no quantified objective for other housing units in the Redevelopment Plan area at this time. The number units to be developed will depend upon the nature of development proposed in the special commercial zone and 101 Specific Plan areas.

<u>Funding Source</u>: The General Fund is the financial source for the staff and City Council work on the mixed-use site development plan. There are no City resources being allocated to the affordable housing component of the site development. Other State and Federal funding sources will be secured by the project applicant to make financially feasible the development of affordable housing.

Mobile Home Standards

<u>Program Description</u>: This program will meet a part of the adequate sites requirements of State law; as noted on page 5-1 State law indicates that a housing element must identify development standards that encourage "factory built housing and mobilehomes". According to the Draft Zoning Ordinance, this use will be permitted on individual lots as a principal use in the ER-1, ER-2, LR and LMR zones. The requirements for this use in these zones are noted below:

- √ The structure has been certified under the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. Section 5401 et. seq.) and has not been altered in violation of applicable codes.
- √ The structure is occupied only as a single family detached residential dwelling.
- The structure is attached to a permanent foundation system in compliance with the provisions of Section 18551 of the State of California Health and Safety Code.
- The structure is covered with an exterior material customarily used on conventional dwellings. The exterior material shall extend to the ground, except that when a skirt or solid concrete or masonry perimeter foundation is used, the exterior covering material need not extend below the top of the foundation.
- The structure has a roof pitch of not less than 2 inches vertical rise for each 12 inches of horizontal run and consists of shingles or other material customarily used for conventional dwellings.

<u>Responsible Agency</u>: Enforcement of the development standards will be the responsibility of the Community Development Department. As noted, mobile homes in the appropriate zones are permitted as a principal use; therefore, only requests for variance would need to be brought before the City Council.

Implementation Schedule: The draft zoning ordinance is presently under preparation. Public hearings on draft before the Citizens Zoning Committee have already been held and City Council hearings are scheduled to occur starting in March of 1992. Adoption of a final zoning ordinance is anticipated by mid-1992. The City will not subject an application to install a manufactured home on a foundation system on a single-family lot to any administrative permit, planning, or development process or requirement different from those required of a conventional home on the same lot.

5-Year Housing Program

Solana Beach Housing Element

Ouantified Objective: Not applicable.

Funding Source: A consultant has been retained by the City to complete the research and analysis for the zoning ordinance. The General Fund is the financial source for this work as

well as the adoption process.

Public Services and Facilities

Capital Improvements Program

<u>Program Description</u>: To ensure the adequate delivery of public services and facilities, the City annually prepares a program of capital improvements. The program does not focus on major infrastructure improvements since the City is already 97% built-out. Thus, the primary focus of the program is on repair and maintenance activities. The scope of the program for FY 1991-92 includes: marine safety; parks and recreation; streets and roads; public facilities;

and non-motorized improvements.

Responsible Agency: The City Manager and Public Works Department are the staff most involved in preparing the program of capital improvements. Annually, through the budget process, the City Council evaluates the program.

Implementation Schedule: Ongoing; annually updated.

Ouantified Objective: Not applicable.

Funding Source: General fund.

Development Impact Fee

Program Description: This program is referred to as the General Plan Public Facilities Fee.

The intent of the program is to achieve improvements identified in the adopted General Plan.

Responsible Agency: The Community Development Department identifies the projects. The

fee is collected by the Finance Department.

5-7

Implementation Schedule: Ongoing.

Quantified Objective: Not applicable.

<u>Funding Source</u>: The current fee is 1% of the construction costs. The City will review the fee as appropriate.

Variety of Housing Types

Land Use Controls

<u>Program Description</u>: The City's land use plan was formulated in 1988 in response to several considerations such as land use compatibility, circulation issues, physical constraints and in response to community goals and objectives concerning land use. Table 18 below provides a statistical summary of the residential uses planned for in the Land Use Element.

TABLE 18 LAND USE PLAN STATISTICAL SUMMARY

Residential Land Use	Acres	Percent of Acreage	Units*
Estate Residential (0-2 du/ac)	280.5	12.5%	280
Low Residential (3 du/ac)	253.2	11.4%	760
Low/Medium Residential (4 du/ac)	375.5	17.0%	1,502
Medium Residential (5-7 du/ac)	147.0	6.7%	882
Medium-High Residential (8-12 du/ac)	80.5	3.6%	805
High Density Residential (13-20 du/ac)	139.8	6.3%	2,307
Total:	1,276.5	57.7%	6,536

^{*} Midpoint of density range used for calculating residential units.

Responsible Agency: The land use plan is implemented by the Community Development Department and City Council.

Implementation Schedule: Ongoing.

Quantified Objective: Residential development consistent with the above distribution.

Funding Source: General Fund.

Second Units

<u>Program Description</u>: Second units are defined as "accessory living units" in the zoning code which is currently under preparation. These second units will be permitted in ER-1, ER-2, LR and LMR zones. The development standards for accessory living units as presently drafted are listed below:

- $\sqrt{}$ A detached primary dwelling units shall exist on the lot or premises.
- The lot on which an accessory living unit is proposed shall have a minimum area of 6,000 square feet, not including any commonly owned area.
- The accessory living unit shall be attached to or contained within the primary dwelling in such a manner as to avoid the appearance of an add-on unit. For the purposes of this regulation, "attachment" shall include second story additions to: 1) the principal structure; 2) an attached garage; or 3) a detached garage. The accessory living unit shall be architecturally integrated with the structure to which it is attached. The entrance to an accessory living unit shall not be visible from the street fronting the property.
- √ The maximum allowed floor area of the accessory living unit shall not exceed 30% of the existing living area or 1,200 square feet in the case of a detached unit. The minimum allowed area of the accessory living unit shall be 350 square feet.
- √ The total floor area of all structures shall not exceed the maximum FAR (floor area ratio) for the site.
- Occupancy of an accessory living unit shall be limited to a maximum of two persons who are at least 60 years of age or handicapped.
- ✓ One off-street parking space shall be provided for the accessory living unit and all existing off-street parking deficiencies shall be corrected.
- Any construction of an accessory living unit shall conform to all property development regulations of the zone in which the property is located as well as all fire, health, safety, and building provisions of this title.

Responsible Agency: The draft zoning ordinance is currently under preparation. Once finalized and adopted, the provisions will be principally implemented by the staff of the Community Development Department and City Council. The permit approval is streamlined because the City does not have a Planning Commission. Moreover, second units will be a <u>permitted</u> use in the stated zones and not subject to a conditional use permit.

Implementation Schedule: The zoning ordinance is scheduled for completion by 1992.

<u>Quantified Objective</u>: A numerical target of five (5) housing units is established for the five year planning period from 1991-1996.

Funding Source: General Fund.

AFFORDABLE HOUSING DEVELOPMENT

Chart 6 presents a summary of the Affordable Housing Development Program. The program consists of three major components which are described in this sub-section:

- Housing Production Incentives
- State and Federal Programs
- Housing Financial Assistance

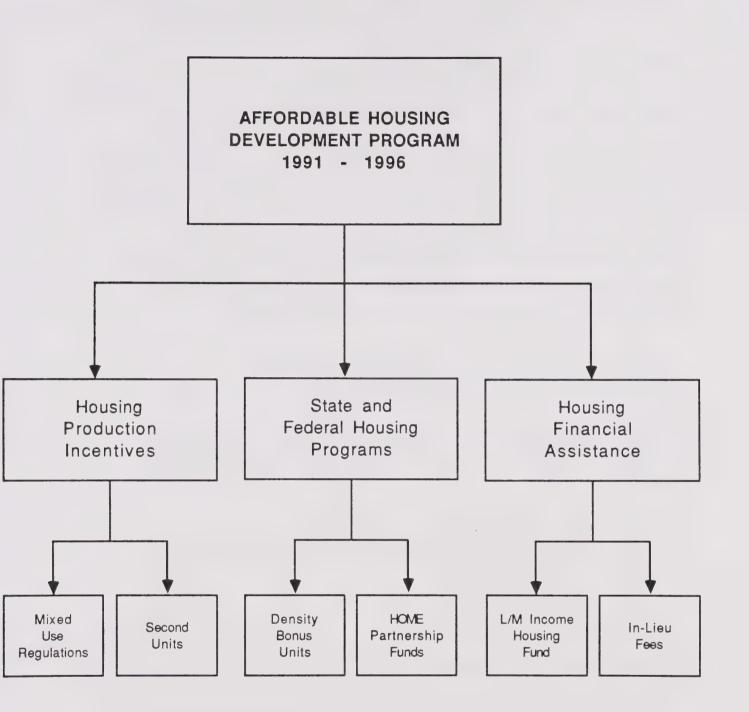
Housing Production Incentives

Mixed Use Regulations

This program, which includes an affordable housing component, was previously described under the program category of "Adequate Housing Sites".

Second Units

This program, which facilitates the development of affordable housing, was previously described under the program category of "Variety of Housing Types". As indicated in that sub-section the numerical target for the development of second units during the 5-year program period is five dwellings.



State and Federal Housing Programs

Density Bonus Units

Program Description: Government Code Sections 65913.4, 65915 and 65917, relating to density bonus requirements, were amended in 1989 by Chapter 842. These amendments were effective from January 1 to March 26, 1990. Chapter 31 of the Statutes of 1990 repealed Section 65913.4, and amended Section 65915; this action was effective March 26, 1990. Government Code Section 65915 provides that a local government shall grant a density bonus of at least 25%, and an additional incentive, or financially equivalent incentive(s), to a developer of a housing development agreeing to construct at least:

- $\sqrt{}$ 20% of the units for lower-income households; or
- $\sqrt{10\%}$ of the units for very low-income households; or
- $\sqrt{50\%}$ of the units for senior citizens.

Pursuant to the amendments, every jurisdiction must adopt an implementing ordinance, including a procedure for evaluating preliminary applications. The ordinance must or should include:

- Types of developer incentives to be provided.
- Procedures for modifying development and zoning standards.
- Program administration.
- Terms of affordability.
- Nature of binding agreements.

The City currently has a land use element policy (1.b.VI) which states:

"State-mandated density bonus provisions such as the program outlined in Government Code Section 65915 shall be applicable to projects of less than five units."

Responsible Agency: Staff work on the implementing ordinance will be accomplished by the City Attorney and Community Development Department. The implementing ordinance will be reviewed by the Citizens Zoning Committee and considered at public meetings by the City Council.

<u>Implementation Schedule</u>: The implementing ordinance will be prepared and adopted with 6 to 12 months from adoption of the 1991 Housing Element.

<u>Quantified Objective</u>: The numerical target is 25 density bonus units during the 5-year program period. The objective would be achieved through housing production on site 2 plus five dwellings in small infill projects dispersal throughout the City.

<u>Funding Source</u>: The General Fund will support the work of the City staff on preparation of the implementing ordinance.

HOME Investment Partnership Program

Program Description: The Housing Act of 1990 consolidates some existing and creates new Federal housing programs into a new consolidated program — the HOME Investment Partnership. On a formula basis, HUD will allocate funds to eligible states and localities to access HOME funds. Each state or locality, in order to receive these funds, must first provide a matching contribution from non-Federal sources — 25 or 33 percent of the cost of rehabilitation (depending on the amount of work needed) and 50 percent of the cost of new contruction — and try to maximize participation by the private sector. These matching contributions can be non-cash such as the waiver of development fees. HUD will set per unit cost limites on a markey-by-market basis.

For each participating entitlement jurisdiction, HUD will establish a trust fund account or line of credit, which can be used to invest in affordable housing within the jurisdiction's boundaries. Jurisdictions will have discretion to use the funds as equity investments, interest-or non-interest-bearing loans or advances, interest subsidies or other forms of assistance upon terms that they determine. The remaining funds will be distributed from the state to local jurisdiction on a competitive basis.

Generally, the highest priority is to be given to housing rehabilitation. However, use of funds for new construction is permitted in eligible localities where there is an inadequate supply of affordable rental housing, particularly for "special-needs" populations such as large families and the handicapped, and to replace substandard housing that is not suitable for rehabilitation. New construction also is permitted as part of an approved "neighborhood revitalization program". The program, however, must emphasize rehabilitation, meaning that newly-

constructed units must not account for more than 20 percent of the total units in the program that are assisted with HOME funds. Each local jurisdiction must adopt a housing plan called a Comprehensive Housing Affordability Strategy (CHAS) which describes the community's housing needs.

<u>Responsible Agency</u>: The County of San Diego is now preparing the CHAS for unincorporated territory and the participating cities. The City of Solana Beach is a participating City with the County.

<u>Implementation Schedule</u>: The Draft CHAS is scheduled to be available for review by July 12, 1991. A public area meeting in Solana Beach is set for July 24th. The deadline for submittal of the CHAS to HUD is October 31, 1991.

Ouantified Objective: Not applicable at this time.

<u>Funding Source</u>: The CHAS is a requirement for the County and participating cities to obtain CDBG as well as HOME funds.

Housing Financial Assistance

Low and Moderate Income Housing Fund

<u>Program Description</u>: A redevelopment project area has been established in the City. The Agency has committed to set-aside 20% of the tax increment to the creation of the Low and Moderate Income Housing Fund. In the use of the Fund, the Agency may exercise any or all of its powers including, but not limited to, the following:

- 1. Acquire land or building sites;
- 2. Improve land or building sites with on-site or off-site improvements; but only if the improvements directly and specifically improve or increase the community's supply of low- or moderate-income housing;
- 3. Finance insurance premiums pursuant to Section 33136 of the Redevelopment Law;

- 4. Donate land to private or public persons or entities;
- 5. Construct buildings or structures;
- 6. Acquire buildings or structures;
- 7. Rehabilitate buildings or structures;
- 8. Provide subsidies to or for the benefit of persons or families of very low, low or moderate income to the extent those households cannot obtain housing at affordable costs on the open market. Housing units available on the open market are those units developed without direct government subsidies. Subsidies for the purpose of this paragraph include any costs or reduced income resulting from below-market-rate sale or lease, grant, or donation of land to private for-profit and nonprofit organizations for the purpose of providing low- and moderate-income housing, if at least half the units provided as a result of each transfer are affordable to lower income households;
- 9. Develop plans, pay principal and interest on bonds, loans, advances, or other indebtedness or pay financing or carrying charges; and
- 10. Preserve the availability to lower income households of affordable housing units in housing developments which are assisted or subsidized by public entities and which are threatened with imminent conversion to market rates. *

^{*} To "Maintain the community's supply of mobilehomes", is an eligible expenditure. It was deleted because it is impractical to accomplish given the zoning and condition of the existing parks, the limitations on vacant residential land of sufficient size to accommodate mobilehomes in a mobilehome park setting.

<u>Responsible Agency</u>: The staff most closely involved with the Agency and LMIHF includes the City Manager, City Attorney and Community Development Department.

<u>Implementation Schedule</u>: The Housing Fund is not very large now nor is it expected to be extensive during the 1991-1996 5-year time period. The fund, however, may be helpful to support research such as the "inclusionary housing program/in-lieu fee" study.

Quantified Objective: Not applicable at this time.

<u>Funding Source</u>: Listed below are the projected <u>cumulative</u> Housing Fund balances for the years 1990-1996:

Year	Cumulative Balance
1990-91	\$7,472
1991-92	\$22,955
1992-93	\$47,024
1993-94	\$80,281
1994-95	\$123,391
1995-96	\$177,020

Inclusionary Housing Program/In Lieu Fees

<u>Program Description</u>: The concept of this program is included in the adopted 1988 Housing Element. Action program #7 of the City's current Housing Element states: "Develop a Subdivision Ordinance requiring in-lieu fees for the provision of housing assistance and/or the development of low and moderate income housing". The concept has been *refined* to encompass the preparation of an ordinance to require that 10% of all units built in projects of 10 or more units be affordable for very and low income households. The ordinance shall stipulate that the project sponsors may pay a fee in-lieu of constructing the new housing if on-site development is financially infeasible.

<u>Responsible Agency</u>: The Community Development Department and City Attorney office will be the staff responsible for drafting the ordinance. Public review and discussion will be conducted at Public Hearings before the Citizens Zoning Committee and City Council.

<u>Implementation Schedule</u>: Upon adoption of the Housing Element Update, the City Council will authorize the ordinance to be prepared with the appropriate research to be completed to establish the nexus between residential development, need for affordable housing and the fee. It is anticipated that the ordinance will be ready for City Council consideration one-year from adoption of the 1991 Housing Element.

Quantified Objective: The numerical objective is 10% affordable housing units within projects of 10 or more dwellings or a fee that cumulatively would significantly contribute to satisfying the City's share of regional housing needs. Because of the limited amount of vacant land, the private developers probably will more frequently opt for a fee payment instead of on-site development. All fee payments will be placed into an "affordable housing fund". As part of the Annual Progress Report on meeting fair share needs, the City staff will inform the City Council on the status of this program and make appropriate recommendations for adjustments, if necessary.

<u>Funding Source</u>: The staff work necessary for the research and ordinance preparation will be financed by the General Fund.

REMOVAL OF GOVERNMENTAL CONSTRAINTS

As previously stated, Section 65583(c)(3) requires that a local housing element:

"Address and, where appropriate and legally possible, remove governmental constraints to the <u>maintenance</u>, <u>improvement</u> and <u>development</u> of housing." (emphasis added).

Housing market conditions have stimulated private sector remodeling and structural improvements. The quality of the housing stock has been maintained and improved since adoption of the current Housing Element.

The City's efforts to improve the condition of housing encompass a full-range of activities, including periodic reconnaissance surveys to spot incipent problem; housing code enforcement; and rehabilitation programs with financial incentives. In addition, in the future resources from the 20% set-aside funds may be available to design a local houising improvement and rehabilitation program.

Many actions taken recently by the City have reduced or mitigated governmental constraints on the development of housing. These include:

- drafting a zoning ordinance that is consistent with the General Plan;
- establishing a community redevelopment agency;
- devising mixed-use regulations;
- identification of sites suitable for residential developments; and
- preparation of development standards for second units.

In addition, the 1991 Housing Element includes two recommended actions which will remove governmental constraints: 1) preparation and adoption of a density bonus implementation ordinance; and 2) preparation for review purposes of an inclusionary housing/in-lieu fee program.

As a further effort to mitigate potential governmental constraints, the City will investigate the

possibility of using higher density residential land use designations as a transition between commercial and industrial areas and single family areas. The City will initiate and complete this analysis within 12 months of adoption of the 1991 Housing Element.

In addition, the City will establish criteria for the granting of fee waivers to reduce the production costs of new affordable housing. The criteria will be formalized in a resolution to be adopted by the City Council. The resolution will be prepared and adopted by the City Council within 12 to 18 months of approval of the 1991 Housing Element.

HOUSING CONSERVATION AND IMPROVEMENT

The City's program is displayed in Chart 7. As shown, the program consists of two major components: 1) Affordability Conservation; and 2) Structural Conservation.

Affordability Conservation

Section 8 Rental Assistance

<u>Program Description</u>: This program provides rental assistance to income eligible very low income households. This program enables very low income households to keep rental payments at an affordable level (i.e., 30% of income). Currently, 25 households are receiving financial assistance through the provisions of this program.

Responsible Agency: The program is administered by the San Diego County Housing Authority. The City obtains information annually on the number and type of households that are being assisted. The City facilitates the implementation of this program by virtue of a "participating agreement" with the County Housing Authority. In addition, the City has published flyers in both English and Spanish notifying residents and landlords of the availability of Section 8 rental assistance. This action by the City has been particularly helpful in informing Hispanic residents about the availability of Section 8 rental assistance.

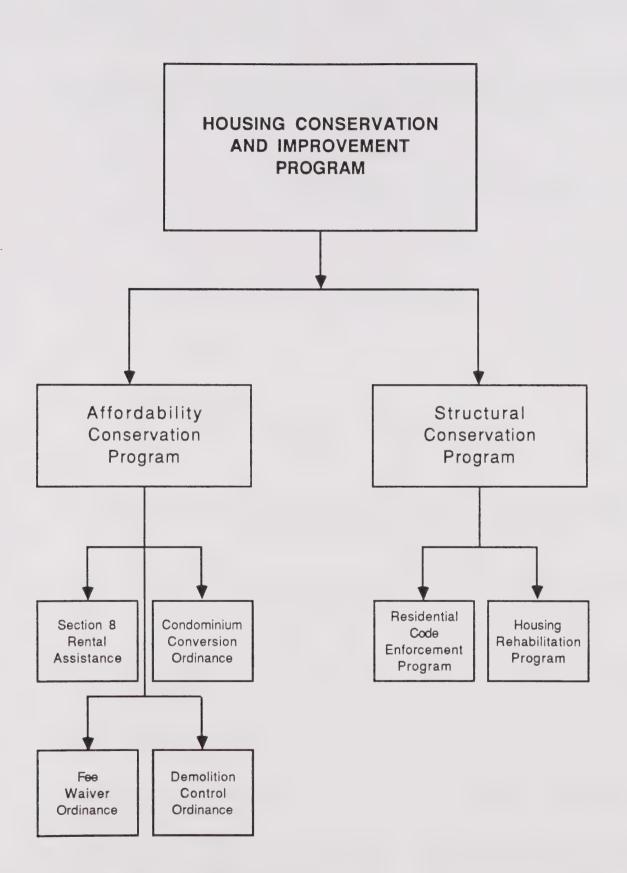
<u>Implementation Schedule</u>: Ongoing individuals contracts between the property owners and the Housing Authority are made to implement the program.

Quantified Objective: Maintain rental assistance for at least 25 very low income households.

<u>Funding Source</u>: Financial resources for the rental assistance are derived from the U.S. Department of Housing and Urban Development.

Condominium Conversion Policy

The City's primary goal is to preserve existing rental housing. As a result, the City shall consider requests for the conversion of an existing apartment to a condominium development only when the rental vacancy rate exceeds 6%. The rental vacancy rate shall include occupied rental housing, rented but not yet occupied units, vacant for rent units, and rental units unoccupied but having received a certificate of occupancies. In the event a conversion request is granted, the City Council shall require that 10% of the housing units be reserved for occupancy by very low and low income households or payment of a fee in-lieu of the reservation of affordable units. As with the inclusionary housing program, the policy shall apply to projects of 10 or more dwelling units.



<u>Responsible Agency</u>: The primary staff involved in monitoring the rental supply and processing condominium conversion applications is the Community Development Department.

Quantified Objective: Retain the affordable rental housing supply.

<u>Funding Source</u>: The General Fund supports the staff work, when necessary, to implement this policy.

Implementation Schedule: Ongoing implementation.

Fee Waiver Ordinance

<u>Program Description:</u> This program involves the development of an ordinance to permit fee waivers to encourage the conversion of existing units to restricted very low and low income affordable units.

<u>Responsible Agency:</u> The City staff responsible for preparing the fee waiver ordinance will be the City Attorney and Community Development Department.

<u>Quantified Objective</u>: Increase the number of existing housing units with restricted rents with the means of very low and low income households.

<u>Funding Source</u>: The funding source for the staff work on the ordinance preparation will be the General Fund.

<u>Time Schedule:</u> The ordinance will be prepared for consideration by the City Council within 12 months of adoption of the 1991 Housing Element.

Demolition Control Ordinance

<u>Program Description:</u> To the extent permitted by law, the City will consider the establishment of a demolition control ordinance. The purpose of the ordinance is to preserve the existing housing stock. The ordinance also will include a consideration of requiring replacement units to preserve or set aside affordable units.

Responsible Agency: The staff responsible for preparation of the draft ordinance include: Community Development Department and City Attorney.

Ouantified Objective: Retain and/or replace the affordable rental housing supply.

<u>Funding Source</u>: Funding for the staff work on the ordinance preparation will be derived from the General Fund.

<u>Implementation Schedule:</u> The ordinance preparation and adoption (if approved) will occue within 12 months of adoption of the 1991 Housing Element.

Structural Conservation

Residential Code Enforcement

<u>Program Description</u>: The City's code enforcement program ionvolves several actions. The housign stock in need of improvement is identified by complaints made to the city and periodic reconnaissance surveys to check on housing conditions. Obvious code violations are quickly acted upon by the staff. The staff also works with the individual property owners to work out problems and discuss any financial assistance that may be available.

<u>Responsible Agency</u>: The staff most extensively involved in the code enforcement program includes the Building Department and Community Development Department.

<u>Implementation Schedule</u>: Ongoing. The residential code enforcement program will be implemented throughout the five-year housing program.

<u>Ouantified Objective</u>: Not applicable.

<u>Funding Source</u>: The General Fund supports the staff work for the code enforcement program.

Housing Rehabilitation Program

<u>Program Description</u>: In cooperation with the San Diego Housing Authority, the following loans and grants are available:

- √ Interest Subsidy Loan: The Housing Authority pays 7% of the current interest rate and the homeowner pays the balance. Loans based upon rehabilitation needs and owner's ability to repay the loan can be made with repayment arranged by the financial institution involved.
- √ Elderly/Handicapped Grant: The homeowner must be either age 62 or older, or handicapped. Up to \$1,500 can be given with no payback requirement for those who meet the above criteria and the income limits for their family size. Applicants' income must be below 80% of the median income for San Diego County.
- √ <u>Weatherization Grants</u>: Up to \$1,000 can be given to homeowner or mobilehome owners who live within the designated areas. The money can be used only for weatherization items and the owner's income must be under 80% of the San Diego County median income.
- √ <u>Deferred Loan</u>: There is no interest on this loan. The total amount borrowed must be repaid when the property changes hands. Owners may borrow up to \$20,000. Family income must be below 80% of the median income for San Diego County.
- Nental Rehabilitation Program: Funds are available to qualifying owners of rental property for rehabilitation of these units. Loans up to 50% of the project cost are available.

	1	2	3	Media 4	n Income by F	Housing Size:
80%	21,200	24,230	27,250	30,300	32,200	34,100
50%	13,600	15,550	17,500	19,450	21,000	22,550

<u>Responsible Agency</u>: The San Diego County Housing Authority implements this program. The City has distributed a flyer -- in both English and Spanish -- to announce the basic assistance available and eligibility criteria.

<u>Implementation Schedule</u>: It is anticipated that the rehabilitation financial assistance will be available throughout the five year program period.

<u>Ouantified Objective</u>: The numerical target is 10 substandard housing units to be rehabilitated during the five-year program period spanning 1991-1996.

<u>Funding Source</u>: The Housing Authority's financial resources are derived from Federal Community Development Block Grant funds.

5-25

EQUAL HOUSING OPPORTUNITY

With regard to complying with this provision of the State housing law, HCD has offered the following advice:

"Since state and federal laws uniformly outlaw most kinds of housing discrimination, local government's role is to identify strategies which will support and implement these laws. Such strategies may include consultation with fair housing and counseling organizations in the community to document the incidence of housing discrimination and the availability of services to address the problem. If these services are not available or are inadequate, the locality can request technical assistance from the district office of the Department of Fair Employment and Housing to develop specific local government actions to promote fair housing opportunity.

In smaller localities, the local program may involve the dissemination of information on fair housing laws, and referrals to the district office of the Department of Fair Employment and Housing or other appropriate agencies. In large and/or urban jurisdictions, more direct program action would be appropriate. Examples of such programs include a commitment to use Community Development Block grant funds to support fair housing and counseling services. Also the locality may wish to create a fair housing council which can investigate and resolve discriminatory complaints, and advocate specific equal housing opportunity actions before community and business organizations."

The City supports fair housing laws and statutes. During the next two years, the City staff will be informed of existing laws and agencies to contact in the event of discrimination complaints. In addition, the City will make available to the general public the Fair Housing Handbook published by the Heartland Human Relations. Moreover, as part of the CDBG process, the City will explore additional opportunities to enhance fair housing in the City.

ASSISTED HOUSING AT RISK OF CONVERSION TO MARKET RATE HOUSING

As explained previously, the City has no Section 236 projects located in the community. There are two projects with housing units set-aside for low income households. These projects, however, have regulatory agreements that run to the years 2001 and 2002.

Circulation Element



City of Solana Beach General Plan Program

Phillips Brandt Reddick



SOLANA BEACH GENERAL PLAN CIRCULATION ELEMENT

City of Solana Beach 380 Stevens Avenue, Suite 120 Solana Beach, California 92075 (619) 755-2998

Solana Beach City Council
Margaret Schlesinger, Mayor
Jack Moore, Deputy Mayor
Marion Dodson, Council Member
Richard Hendlin, Council Member
Celine Olson, Council Member

Adopted November 14, 1988



TABLE OF CONTENTS

		Page Number
1.0	INTRODUCTION	1
1.0		
	1.1 Overview	1
	1.2 Purpose	2
	1.3 Authorization	3
2.0	EXISTING CONDITIONS/ISSUE ANALYSIS	4
	2.1 Existing Circulation System	4
	2.2 Importance of System	7
	2.3 Existing Problems	7
	2.4 Future Travel Demands	8
	2.5 Constraints	9
3.0	GOALS, OBJECTIVES AND POLICIES	13
4.0	THE CIRCULATION PLAN	18
	4.1 Relationship to Land Use and Environment	18
	4.2 Alternative Modes of Transportation	21
	4.3 Improvement Funding and Implementation	22

DRAFT CIRCULATION ELEMENT

1.0 INTRODUCTION

The City of Solana Beach Circulation Element has been developed in response to issues raised and goals, policies, and objectives established by the consultant team and General Plan Advisory Committee. It is intended to provide a balanced circulation system that will provide adequate capacity to support the travel demands of the land uses included in the land use element while at the same time maintaining an acceptable quality of life for the residents of Solana Beach.

1.1 OVERVIEW

1.1.1 Contents of Element

The circulation element is divided into four sections: (1) Introduction; (2) Existing Conditions/Issues Analysis; (3) Goals, Objectives, and Policies; and (4) the Circulation Plan. The plan is intended to be responsive to the goals, objectives, and policies of the city in planning for its future growth while at the same time mitigating existing problems or concerns. The circulation element states general policy which will serve to guide the development of future, more detailed circulation system implementation programs.

1.1.2 Key Issues

The key issues underlying the proposals included in the circulation element revolve around Solana Beach citizens' desires to preserve the quality of life in residential areas of the city while at the same time providing accessibility to and local routes around the Interstate 5 and Highway 101. The circulation element has been designed to reduce the level of traffic congestion experienced by residents by improving intersection capacity along Lomas Santa Fe Drive and working with adjacent jurisdictions to improve Via De La Valle.

1.1.3 Overview of Goals, Objectives, and Policies

The Goals, Objectives, and Policies of the Circulation Element are presented in full in Section 3.0, but can be summarized as follows:

- Provide a street network to move people and goods safely and efficiently.

- Maintain a minimum Level of Service C at all intersections during non-peak hours and Level Of Service D (volume/capacity ratio of 0.90 or less) at all intersections during peak hours to ensure that traffic delays are kept to a minimum.
- Promote a public transportation system that is safe, convenient, efficient, and meets the identified needs of the Solana Beach Community.
- Promote safe alternatives to motorized transportation that meet the needs of all city residents.
- Provide an adequate supply of private off-street and public parking to meet the needs of residents and visitors to the city.

1.2 PURPOSE

Since the circulation element was first required by State law in 1955, transportation technology and needs in California have changed greatly, with the emphasis today on the development of a balanced, multi-modal transportation system. According to State law, the policies and plan proposals of the circulation element should:

- Coordinate the transportation and circulation system with planned land uses;
- Promote the efficient transport of goods and the safe and effective movement of all segments of the population;
- Make efficient use of existing transportation facilities; and
- Protect environmental quality and promote the wise and equitable use of economic and natural resources.

The circulation element should cover the following to the extent that they pertain to the community:

- Streets and highways;
- Parking provisions;
- Transit and paratransit;
- Railroads:

- Air transportation; and
- Bicycle and pedestrian facilities.

The policies and plan proposals of the circulation element should be coordinated closely with those of the land use, housing, noise, and community design elements.

1.3 AUTHORIZATION

Under State planning law, each city must develop and adopt a comprehensive long-term general plan for the physical development of that city. Government Code Section 65302(b) states the following as the mandatory requirement for circulation elements:

"A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan."

2.0 EXISTING CONDITIONS/ISSUE ANALYSIS

2.1 EXISTING CIRCULATION SYSTEM

2.1.1 Introduction

The City of Solana Beach, located along the central coast of San Diego County, is served by a network of roadways illustrated in Exhibit 1. The number of through lanes for existing roadways and the existing intersection controls are identified on Exhibit 1. A popular beach community, access to Solana Beach is possible through four primary corridors:

- Highway 101;
- Interstate 5;
- Lomas Santa Fe Drive; and
- Via De La Valle

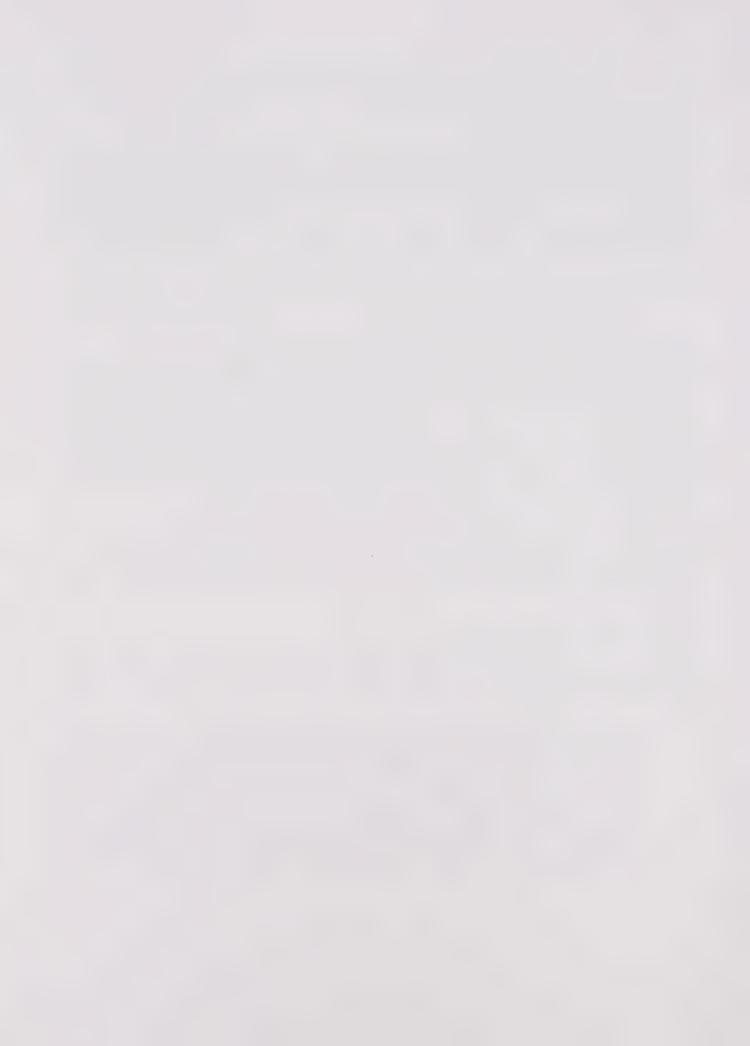
These four corridors traverse the Solana Beach and surrounding communities in a north-south (Highway 101/I-5) and east-west (Lomas Santa Fe Drive/Via De La Valle) orientation, creating a grid network of roads. The network affords inter-regional connections to southern San Diego County, Orange, and Los Angeles counties, as well as access to surrounding communities along the coast and inland communities such as Rancho Santa Fe and Fairbanks Ranch. These four corridors could be utilized as emergency routes in case of a community disaster.

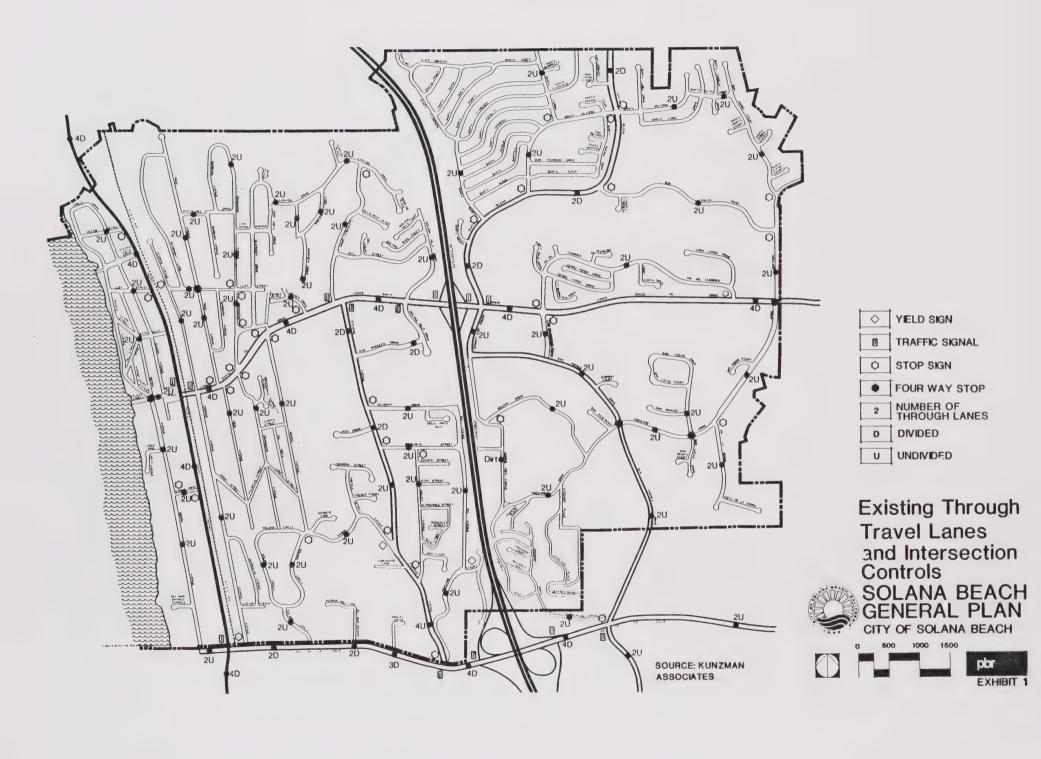
Solana Beach is likely to experience an increase in traffic demand due to growth within and around the city and due to increased commercial activity in the city, thus requiring preventive mitigation measures to alleviate future traffic problems.

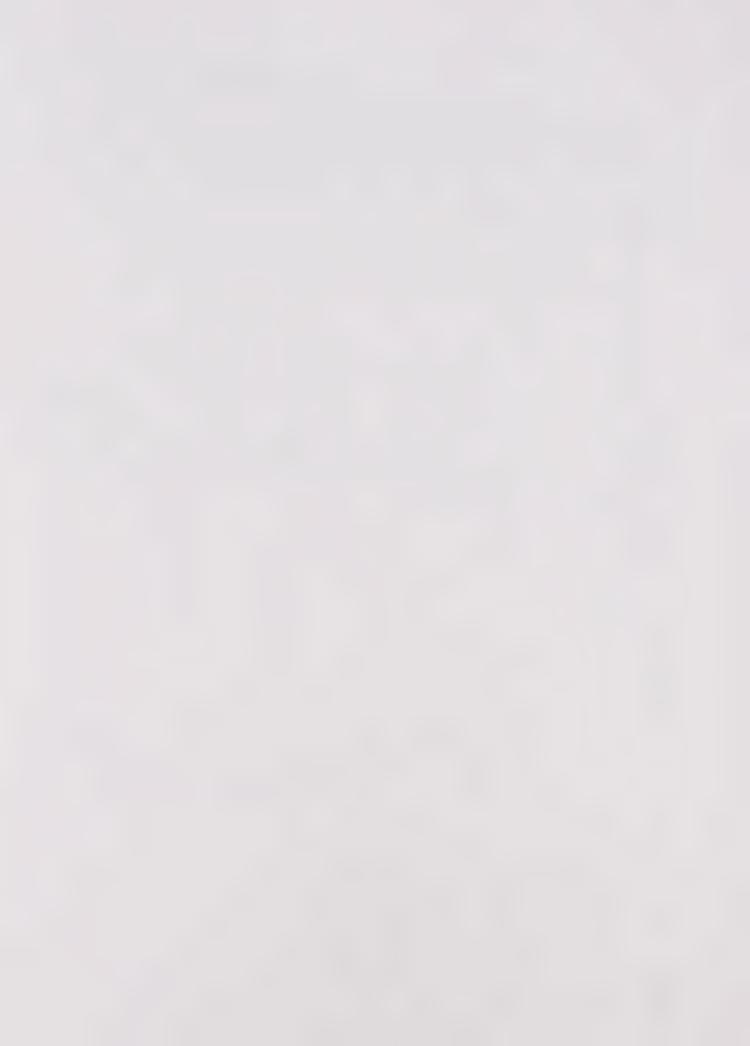
2.1.2 Regional Facilities

There are two major corridors which traverse the city and serve significant levels of through traffic while providing regional access to Solana Beach.

- Interstate 5 is the major north-south interregional facility in the County, providing Solana Beach with direct access to Encinitas, Carlsbad, Oceanside, San Diego and other southern communities and to Orange and Los Angeles counties to the north. Bisecting Solana Beach, Interstate 5 is eight lanes. Local access is provided via interchanges with Lomas Santa Fe Drive and Via De La Valle. Existing (1987) average daily traffic on Interstate 5 in this vicinity is about 156,000 vehicles per day.







- <u>Highway 101</u> is a four-lane major arterial. With its north-south orientation, it provides primary access to the numerous beaches and parks along the coast as well as connections to the communities of Encinitas, Carlsbad and Oceanside to the north and Del Mar to the south. It is also a popular route for bicyclists. Existing (1987) daily traffic volumes average about 17,500 vehicles per day.

2.1.3 Key Arterials, Local Streets

Within the Solana Beach local circulation system, there are six significant facilities. These range in classification from major arterial to light collector streets as described below:

Lomas Santa Fe Drive is a four-lane divided road with full access and parking control. Running east-west, it provides coastal, interstate and inland access for Solana Beach. West of I-5, traffic volumes average about 22,300 vehicles per day. East of I-5, traffic volumes drop considerably to about 8,500 vehicles per day. A bike lane is striped on both sides of the street.

<u>Via De La Valle</u> runs east-west and is a four-lane divided road with full access and parking control and on-street bike lanes. Only a small portion of the roadway is actually within the Solana Beach city limits. It provides inland and beach access as well as inter-regional access via an interchange with I-5. Via De La Valle also provides direct access to the Del Mar Fairgrounds, a major seasonal traffic generator. Between I-5 and Jimmy Durante Boulevard, traffic volumes average about 43,300 vehicles per day. West of Jimmy Durante Boulevard, average daily traffic is 16,600 vehicles per day. East of I-5, traffic volumes are about 18,400 vehicles per day.

<u>Cedros</u> <u>Avenue</u> runs north-south and is a two-lane collector. As such, its primary function is to provide local access to business and residents adjacent to this facility.

<u>San Andres Drive</u> is a two-lane curving collector with an eastwest, north-south orientation. It provides secondary access to the southeastern quadrant of Solana Beach, which is primarily a residential area.

<u>Highland Drive</u> is primarily a north-south running two-lane collector. It provides important neighborhood access in both the southeastern and northeastern portions of the City, including San Dieguito County Park. Highland Drive also intersects with El Camino Real, a major arterial that also provides access to a number of surrounding communities.

Stevens Avenue is a north-south commercial collector roadway which extends from Via De La Valle at Jimmy Durante Boulevard to Lomas Santa Fe Drive east of Glencrest Drive. It provides access to business and residential areas on either side of this facility. It's existing cross-section varies from two lanes undivided to four lanes undivided.

2.1.4 Public Transportation

Public transit is an essential part of any transportation system. Not only does public transit provide added mobility to its users, but it also increases energy efficiency by providing an alternative to high automobile costs and to traffic congestion in highly traveled areas. Public transit provides environmental benefits such as reduced air pollution emissions. Combining all of the above features makes public transit not only essential, but a beneficial part of any transportation system.

Transit service in Solana Beach is provided by North County Transit, which operates two routes in the city. Line 301 operates daily between Oceanside and San Diego along Highway 101. Line 308 operates daily between Cardiff Town Center and Escondido with stops along Lomas Santa Fe Drive, Stevens Avenue, Valley Avenue, and Via De La Valle.

Complementing the local transit system is a San Diego County-funded express bus service operated by Sundance Stage Lines. The route provides peak hour freeway express service to downtown San Diego in the morning and returns in the evening. The express bus currently stops in the City at a location off San Rodolfo Drive near Dixieline Lumber.

2.1.5 Railroads

The AT & SF rail line runs north-south through the City of Solana Beach, parallel to and east of Highway 101. AMTRAK rail passenger service is provided between Los Angeles and San Diego via the Coast Line with the closest station located in Del Mar. The AT & SF rail line has an at-grade crossing with Lomas Santa Fe Drive, and traffic flow is periodically interrupted by train service. Future use of the AT & SF rail line for "light rail" transit service is not currently planned.

2.1.6 Bicycle Route System

The City of Solana Beach presently has only three bicycle routes within its boundaries. These routes are on-road striped lanes along Highway 101, Via De La Valle, and Lomas Santa Fe Drive.

2.1.7 Air Transportation

There are no airport facilities within the City of Solana Beach. Scheduled commercial airline flights are available at the San Diego International Airport (Lindbergh Field).

2.2 IMPORTANCE OF SYSTEM

The circulation system of every city effects not only the movement of people and goods but also the physical, social, and economic environment of the city. The circulation system heavily influences the physical settlement patterns of a city, providing access to land uses, often determining their allowable densities and creating boundaries/separations between alternative land uses. Economic activities require circulation of people and goods, particularly commercial activities such as those in Solana Beach, and thus the viability of the community's economy can be directly affected by the circulation element.

No city, particularly one like Solana Beach which lies in the middle of the San Diego County coastline, is an island in its regional setting. The circulation element should therefore be coordinated with the regional transportation plan to provide regional continuity. Interstate 5 not only serves as the primary access route for travel to and from Solana Beach, but also as the primary connection between the Los Angeles metropolitan area and San Diego.

2.3 EXISTING PROBLEMS

The consultant team and General Plan Advisory Committee identified the following key issues that they felt should be addressed in the circulation element analysis:

- The interchange at Lomas Santa Fe Drive and Interstate 5 should be improved and the City should work with CalTrans to coordinate traffic signals on Lomas Santa Fe Drive.
- The potential to depress the railroad tracks (adjacent to Highway 101) and to provide a pedestrian overcrossing to reduce circulation conflicts should be explored.
- Impediments to vehicular circulation on Highway 101 should be minimized.
- The City should retain the right-of-way to extend Via La Senda as a means of reducing traffic congestion on Highland Drive.

- Vehicular capacity at the Via De La Valle interchange should be increased to reduce usage of other city streets by Del Mar Fairground trips.
- Measures should be taken to reduce circulation problems at the juncture of Stevens and Nardo Avenues.
- Cedros Avenue should have a uniform right-of-way.
- Consideration should be given to improving the current circulation pattern around the post office in an effort to reduce local congestion on Sierra Avenue.
- Methods to accommodate summer beach traffic should be developed.
- The potential for a bicycle trail on San Andres Drive and Highland Drive should be explored.
- The Scenic Highway designation for Highway 101 should be maintained.
- The need for traffic signals at the following intersections should be explored:

Lomas Santa Fe Drive/Highland Drive Highway 101/Dahlia Drive Highway 101/Ocean Street

2.4 FUTURE TRAVEL DEMANDS

There is a close interrelationship between land use and transportation in that new land use development is the key determinant of increased traffic generation. New developments produce or attract traffic to them. The proposed land use plan will accommodate additional development which in turn will generate increased demand for travel within the City of Solana Beach. In addition, growth in San Diego County will similarly generate additional traffic which will increase the demand for travel through the City of Solana Beach.

2.4.1 Future Trip Generation

The most significant increases in potential trip-making in Solana Beach is attributable to the increased residential and commercial development provided for in the land use plan. Residential units within the city are projected to increase from 6,245 dwellings to 6,536 dwellings upon buildout of the general plan. This increase represents approximately 4,200 additional daily vehicle trips on the street network.

Changes in non-residential land use designations yield a reduction in office and industrial uses for general plan buildout conditions. However, commercial uses are projected to increase from 116.4 acres to 150.4 acres. This shift in land uses from office/industrial to commercial generates approximately 10,800 additional daily vehicle trips within the city.

Existing Solana Beach land uses generate about 150,000 daily vehicle trips. The total number of daily vehicle trips generated in the city is projected to increase by ten percent, increasing from 150,000 to 165,000 daily vehicle trips at buildout of the general plan.

2.4.2 Increased Through Traffic

It was estimated that approximately two thirds (69 percent) of the traffic entering the city on Highway 101 is traffic which passes through Solana Beach without stopping. This equates to approximately 12,000 vehicles per day traveling through Solana Beach on Highway 101.

It was also estimated that approximately 94 percent of the traffic entering the city on Interstate 5 is traffic which passes through Solana Beach without stopping. This equates to approximately 146,000 vehicles per day traveling through Solana Beach on Interstate 5.

Significant amounts of through traffic are also present on segments of Lomas Santa Fe Drive and Via De La Valle, particularly east of Interstate 5. Between Jimmy Durante Boulevard and the freeway, about 16,000 through trips are estimated to use Via De La Valle on a daily basis.

The level of increase in through traffic on both Highway 101 and I-5 will largely be influenced by the level of growth in the entire coastline area of San Diego County.

2.5 CONSTRAINTS

2.5.1. Future Volumes

The addition of traffic which could be generated by the land uses included in the general plan, together with increased through traffic associated with regional growth, would increase traffic volumes on many streets in Solana Beach. Exhibit 2 shows 1987 traffic volumes based upon the San Diego Association of Governments (SANDAG) and CalTrans data and Table 1 lists existing Intersection Capacity Utilization and Level of Service at key intersections. Table 2 provides descriptions for the various levels of service. Exhibit 3 shows future volume projections for the city based upon the San Dieguito Community







Table 1

EXISTING INTERSECTION CAPACITY UTILIZATION AND LEVEL OF SERVICE

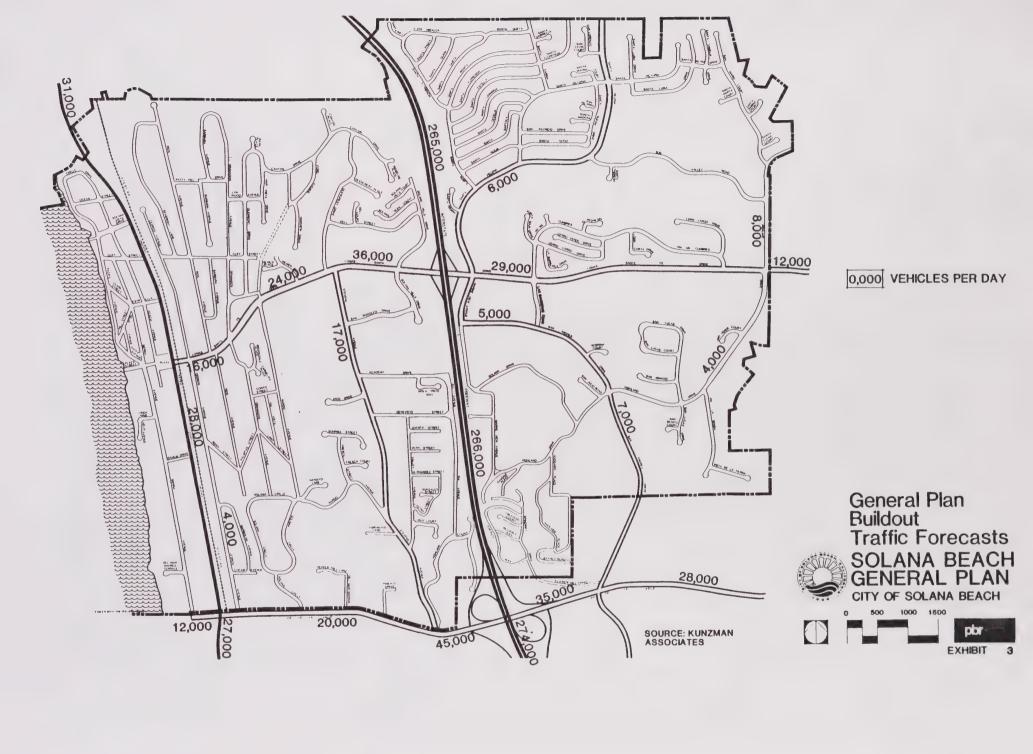
Number	Intersection	ICU	Level of Service
1	Lomas Santa Fe/Pacific Coast Highway	0.70	С
2	Lomas Santa Fe/Cedros Avenue	0.40	A
3	Lomas Santa Fe/Stevens Avenue	0.73	С
4	Lomas Santa Fe/I-5 Southbound Ramps	0.78	С
5	Lomas Santa Fe/I-5 Northbound Ramps	0.80	D
	Unsignalized Intersections		
6	Lomas Santa Fe/Highland Drive	N/A	D
7	Highland Drive/San Andres Drive	N/A	A
8	Nardo Avenue/Stevens-Valley Avenue	N/A	С
1			

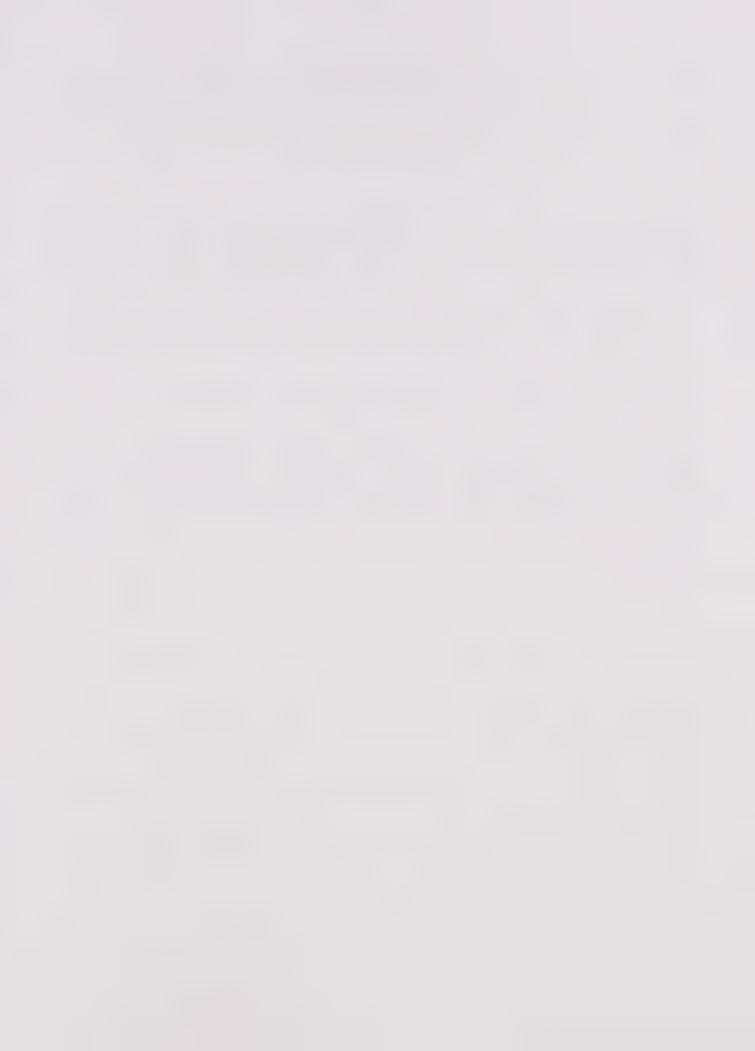
Table 2
LEVEL OF SERVICE DESCRIPTION

Level of Service	Description	Stopped Delay Per Vehicle (Seconds)	Intersection Capacity Utilization (Percent)
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 5.0	0 to 60
В	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	5.1 to 15.0	61 to 70
С	Level of Service generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	15.1 to 25.0	71 to 80
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	25.1 to 40.0	81 to 90
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	40.1 to 60.0	91 to 100
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	60.1 +	100 +

Source: "Highway Capacity Manual" Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 1985, Pages 9-4 to 9-5.







Planning Area traffic forecasts and estimates prepared by Kunzman Associates. The Circulation Plan presented in Section 4.0 of this element identifies the improvements required to mitigate these impacts and accommodate the growth forecasts in the land use element.

2.5.2 Fiscal Limitations

Many of the improvements included in the circulation element will have citywide and/or regional benefit and may need to be constructed prior to the development of the contiguous property. The city should develop alternate funding mechanisms to pay for the construction of circulation improvements included in the circulation element. Potential alternatives include allocation of general fund revenues to a Capital Improvement Program, implementation of an off-site Road Improvement Fee on new developments, or consideration of Benefit Assessment or Mello-Roos Districts to assess all benefiting property owners for infrastructure improvements.

2.5.3 <u>Jurisdictional</u> <u>Responsibilities</u>

Within the limits of Solana Beach, all of the streets/roads fall under the jurisdiction of the city, except Interstate 5 which is part of the Interstate system and under the jurisdiction of CalTrans. Outside of the city, in the immediately adjacent areas, the streets/roads are under the jurisdiction of the City of Del Mar, City of Encinitas, City of San Diego, and County of San Diego.

3.0 GOALS, OBJECTIVES, AND POLICIES

GOAL 3.1

TO PROVIDE A STREET NETWORK TO MOVE PEOPLE AND GOODS SAFELY AND EFFICIENTLY.

Objective 1.0

Maintain a minimum Level of Service C at all intersections during non-peak hours and Level of Service D (volume/capacity ratio of 0.90 or less) at all intersections during peak hours to ensure that traffic delays are kept to a minimum.

<u>Policy 1.a</u> The city shall establish street standards and all new road facilities shall be constructed or upgraded, where feasible, to meet city standards.

<u>Policy 1.b</u> The city shall require new developments to be served by roads of adequate capacity and design standards to provide reasonable access by car, truck, transit, or bicycle.

Policy 1.c The city shall require an adequate evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, the city shall require the implementation of appropriate mitigation measures prior to or in conjunction with project development.

<u>Policy 1.d</u> The city shall develop a roadway system to complement urban development as established by the city's adopted general plan. In implementing this policy, the city shall explore possible road extensions and additional roadway links.

<u>Policy 1.e</u> The city shall pursue measures to reduce congestion at intersections and maintain levels of service as identified in Objective 1.0.

<u>Policy 1.f</u> The city shall cooperate with CalTrans to implement necessary improvements at intersections where the agencies have joint jurisdiction such as Lomas Santa Fe Drive at Interstate 5.

Policy 1.q The city shall explore methods to minimize traffic in the vicinity of Del Mar Fairgrounds.

<u>Policy 1.h</u> The city shall endorse and support Interstate 5 interchange improvement projects with minimal environmental impact that provide more direct regional access to the Del Mar Fairgrounds.

Policy 1.i The city shall reserve and protect adequate right-of-way to accommodate future roadway widening projects.

Policy 1.j The city shall support the preparation of travel demand management plans to reduce peak hour commuter traffic impacts in areas with employment concentrations.

Policy 1.k The city shall work with the Public Utilities Commission and Department of Transportation to depress the railroad tracks at Highway 101 and Lomas Santa Fe Drive.

Objective 2.0

Establish adequate measures to ensure traffic safety.

Policy 2.a The city shall enforce speed restrictions throughout the city.

<u>Policy 2.b</u> The city shall require that future roads and improvements to existing roads be designed to minimize conflicting traffic movements such as turning, curb parking, uncontrolled access, and frequent stops.

<u>Policy 2.c</u> The city shall ensure that the development of new private driveways do not pose significant traffic hazards for major arterials and residential collector roads.

<u>Policy 2.d</u> The city shall require that pedestrian, bicycle, and vehicular traffic is separated to the maximum feasible extent.

<u>Policy 2.e</u> The city shall establish a master program of roadway improvements and an ongoing maintenance program to ensure the safety of the city's roadway system.

Policy 2.f The city shall work with the California Public Utilities Commission to explore alternatives for reducing existing and potential traffic conflicts at the Atchison Topeka and Santa Fe Railroad tracks.

Objective 3.0

Preserve the quality of residential neighborhoods by maintaining the legally enforceable speed limits and by discouraging the flow of truck traffic and through traffic in these areas.

<u>Policy 3.a</u> The city shall enforce speed limits of 25 miles per hour in those areas defined by the California Vehicle Code as residential neighborhoods.

<u>Policy 3.b</u> The city shall establish designated truck routes located away from residential areas and prohibit trucks from traversing through residential neighborhoods.

<u>Policy 3.c</u> The city shall maintain adequate levels of service on major city streets pursuant to Objective 1.0 as measures to avoid diversion of through traffic into residential neighborhoods and adequate levels of safety pursuant to Objective 2.0.

Objective 4.0

Establish a capital improvements program which incorporates adequate funding for the city's roadway system.

Policy 4.a The city shall identify and evaluate potential revenue sources for financing roadway system development and improvement projects.

Policy 4.b The city shall pursue viable revenue sources to meet the roadway system funding needs.

<u>Policy 4.c</u> The city shall only implement street widenings when Transportation System Management strategies, such as the removal of on-street parking, lane restriping, etc., have been exhausted.

GOAL 3.2

TO PROMOTE A PUBLIC TRANSPORTATION SYSTEM THAT IS SAFE, CONVENIENT, EFFICIENT, AND MEETS THE IDENTIFIED NEEDS OF THE SOLANA BEACH COMMUNITY.

Objective 1.0

Support a public transportation system and accommodate the mobility needs of transit-dependent persons.

<u>Policy 1.a</u> The city shall support establishment of transit operations when demand levels are sufficient to warrant such service.

<u>Policy 1.b</u> The city shall support improved transit services for elderly and disabled persons.

GOAL 3.3

TO PROMOTE SAFE ALTERNATIVES TO MOTORIZED TRANSPORTATION THAT MEET THE NEEDS OF ALL CITY RESIDENTS.

Objective 1.0

Establish a master plan of bikeways which provides for an adequate system for the safe and efficient movement of cyclists.

Policy 1.a The city shall adopt a master plan of bikeways and shall develop and maintain bikeways as needed and feasible.

Policy 1.b The city shall maximize opportunities for citizen input into the process of planning a bikeway system.

<u>Policy 1.c</u> The city shall pursue all available funding sources to acquire and develop off-road bike paths.

<u>Policy 1.d</u> The city shall maximize the use of public property (e.g., utility and drainage easements, railroad right-of-way) and lightly traveled scenic roads for bikeways.

Objective 2.0

Provide a system of sidewalks or pathways in residential and commercial areas that provides a safe environment for pedestrians and is harmonious with the surrounding neighborhood.

<u>Policy 2.a</u> The city shall require the provision of adequate pedestrian access for new development projects through its standard site plan review process.

Policy 2.b The city shall support the development of pedestrian malls in key activity centers.

<u>Policy 2.c</u> The city shall require the installation of wheelchair ramps on all new sidewalks and shall encourage their installation in older neighborhoods.

GOAL 3.4

TO PROVIDE AN ADEQUATE SUPPLY OF PRIVATE OFF-STREET AND PUBLIC PARKING TO MEET THE NEEDS OF RESIDENTS AND VISITORS TO THE CITY.

Objective 1.0

Adopt an ordinance which specifies minimum parking requirements for various types of land use.

<u>Policy 1.a</u> The city shall enact an ordinance which establishes minimum parking requirements for specified residential, commercial retail, office, tourist-related, industrial, and institutional land uses.

<u>Policy 1.b</u> The city shall establish standard requirements such as necessary design features, the number of required handicapped parking spaces, etc. in conjunction with the parking ordinance.

<u>Policy 1.c</u> The city shall pursue methods of encouraging the provision of increased on-site parking supply through a range of techniques including redevelopment activities.

Objective 2.0

Ensure that developers of new projects or expansions provide adequate off-street parking.

Policy 2.a The city shall enforce its parking ordinance.

<u>Policy 2.b</u> The city shall require developers to provide adequate on-site parking and/or to contribute to a program to acquire and/or maintain off-site facilities.

<u>Policy 2.c</u> The city shall work cooperatively with developers and the business community to develop funding mechanisms for the construction of future parking facilities.

<u>Policy 2.d</u> The city shall encourage joint development of parking facilities to the maximum extent feasible.

4.0 THE CIRCULATION PLAN

4.1 RELATIONSHIP TO LAND USE AND ENVIRONMENT

The circulation plan proposed for Solana Beach has been developed to provide adequate capacity to accommodate the travel demands of the land use element as well as to preserve the quality of life in Solana Beach. Exhibit 4 illustrates the proposed circulation plan.

4.1.1. Major Plan Features

The major plan features recommended by the General Plan Advisory Committee and the consultant team and reflected on Exhibit 4 include the following:

- Identification of several north-south roadways as Collector facilities, including Stevens Avenue/Valley Avenue, Cedros Avenue, Sierra Avenue (between Plaza Street and Via De La Valle), San Andres Drive, Highland Drive, and Santa Helena.
- Designation of Highway 101 as a Scenic Highway.

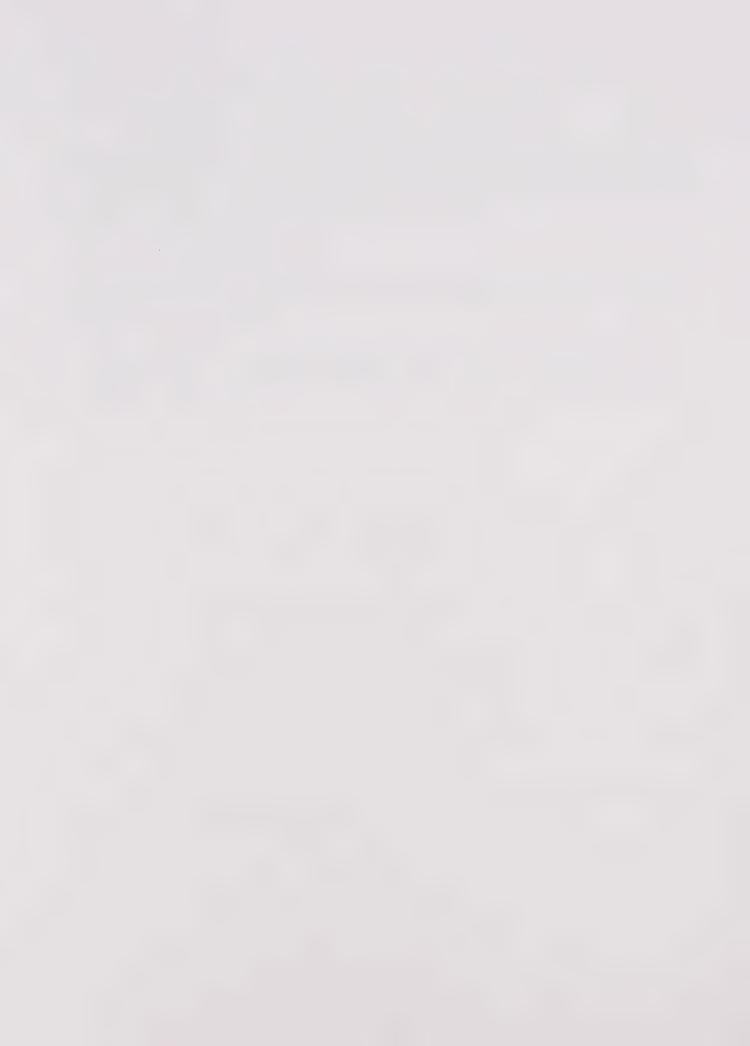
4.1.2 Functional Classification

The functional classification of a roadway is intended to establish its function or role in the overall circulation system. It establishes the hierarchy of streets in terms of their purpose in relation to movement of through traffic versus provision of access to adjacent land uses.

The hierarchy of roadway classifications ranges from freeways (with full control of access, grade-separated interchanges, high speed-high volume traffic, emphasis on longer-distance and intercity travel) to local streets/cul-de-sacs (with unlimited access to fronting properties, low speed-low volume traffic, emphasis on multi-purpose use of the paved street section for travel, parking, pedestrian, and bicycle activity).

Collector roadways vary in width from 50 foot right-of-way to 80 foot right-of-way. Major arterial roadways have a raised median within 102 foot right-of-way.

The following road classifications and functional characteristics have been designated in the Solana Beach Circulation Element (Exhibit 4).



Scenic Highway

- A route with unique or special aesthetic and visual resources which should be protected and upgraded through sensitive highway design and the regulation of development within the scenic corridor.
- A route which provides a pleasant driving environment and community enhancement.
- Striped for one or two lanes in each direction with at least partial control of access and at least partial restriction of on-street parking.

Highway 101 is classified as a state-designated scenic highway in the Solana Beach Circulation Element.

Major Arterial

- A four lane arterial highway with access limitations, divided by a raised or striped median.
- As a type of intercity or community facility, highways are expected to carry the majority of traffic between Solana Beach, adjacent communities, and the freeway system.
- Striped for two lanes in each direction, with shoulders and medians where right-of-way permits, and left-turn lanes at intersections.
- Maximum capacity of 38,000 vehicles per day (assumes 10 percent peak hour, 60/40 directional split, 1,200 vehicles per hour per lane).

Designated major arterials in the Solana Beach Circulation Element include:

- Lomas Santa Fe Drive between Highway 101 and Highland Drive.
- Via De La Valle between Highway 101 and east City boundary.

Collector

- A two-lane to four-lane undivided road with intersections at grade and partial control of access.
- Collectors can serve as a secondary type of highway to provide routes for locally-generated traffic to connect to the major arterial system network, but primarily serve as access routes for local residents to reach activity areas in the city. Collectors may also provide direct access to residential properties.

- Striped for one lane to two lanes in each direction, with curb parking, and left-turn lanes at major intersections.
- Design capacity of 10,000 vehicles per day (determined not by the physical capacity of the road segment, but rather by the desirability of maintaining an acceptable level of traffic on these facilities which may be bordered by fronting land uses).

Designated collectors in the Solana Beach Circulation Element include:

- Sierra Avenue between Plaza Street and Via De La Valle.
- Cedros Avenue between Via De La Valle and Cliff Street.
- Stevens Avenue between Lomas Santa Fe Drive and Valley Avenue (Collector-Commercial).
- Valley Avenue between Stevens Avenue and Via De La Valle (Collector-Commercial).
- San Andres Drive between Marine View Avenue and south City boundary.
- Marine View Avenue between Lomas Santa Fe Drive and San Andres Drive.
- Santa Helena between Lomas Santa Fe Drive and Santa Victoria.
- Santa Victoria between Santa Helena West and Santa Petra Drive.
- Santa Petra Drive between Santa Helena and San Mario Drive.
- San Mario Drive between Santa Petra Drive and Highland Drive.
- Highland Drive between San Andres Drive and east City boundary.
- Las Banderas Drive between Lomas Santa Fe Drive and San Andres Drive.

Local

- Two-lane undivided roads with at-grade intersections and frequent driveway access.
- Local roads are intended to provide access to adjacent residential land uses and to feed traffic to collectors and other roads of higher classification.

- Provide one lane in each direction, with curb parking, but not provided with centerline stripe.
- Design capacity of 2,000 vehicles per day determined not by the physical capacity of the road but rather the acceptable level of traffic which will not adverse the quality of life in residential areas.

The remainder of the streets in the Solana Beach circulation system, not mentioned above, are classified as local streets.

4.1.3 Future Conditions With Proposed Plan

The upgrading of existing roadways to Circulation Element classifications and implementation of new circulation element roadway connections, together with the build-out of the land uses included in the land use element, result in the future average daily traffic volumes illustrated in Exhibit 4. Via De La Valle east of Valley Avenue/Jimmy Durante Boulevard is projected to continue to experience travel demands which exceed its design capacity. This condition will need to be addressed by cooperative City, County, and State improvements in the Via De La Valle/Interstate 5 interchange area.

The city should work cooperatively with CalTrans to maximize the capacity of Via De La Valle through access controls, signal timing optimization, installation of turn lanes, and so forth. The city should also monitor traffic conditions along Via De La Valle and implement policies which will make future development approvals contingent upon maintaining acceptable service levels along both Via De La Valle and Lomas Santa Fe Drive.

4.2 ALTERNATIVE MODES OF TRANSPORTATION

4.2.1 Public Transportation

No specific changes are proposed in the circulation element to the current level of public transit service in the city. The city will support improved transit services for the elderly and

disabled persons and will support establishment of broader-based transit operations when demand levels warrant such a service.

4.2.2 Railroads/Airports

SANDAG is currently exploring the potential for commuter rail service and is considering Solana Beach for potential terminal service. The City Council will be participating in this evaluation process.

4.2.3 Bicycle and Equestrian Trails

As existing facilities are improved and new roadway facilities are implemented, the city should consider the opportunity to incorporate bicycle routes or trails into the design of roadways. This would be particularly appropriate for San Andres Drive and Highland Drive.

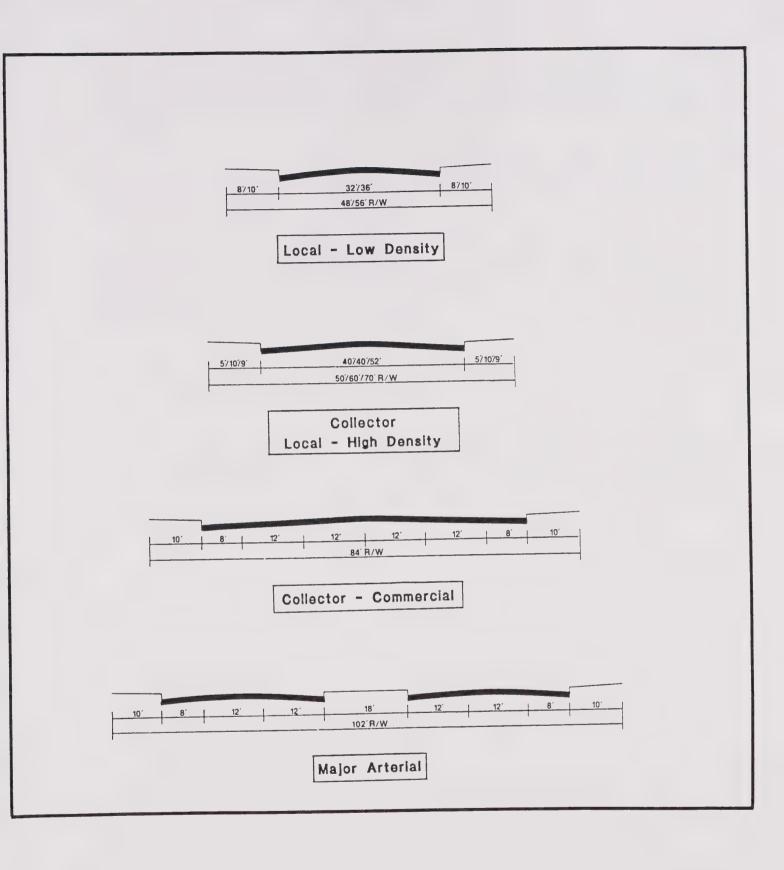
4.2.4 Pedestrian Access

A separate system of off-road pedestrian trails is not proposed as part of the circulation element, but the city will strive to increase pedestrian accessibility by implementing the policies of the circulation element which call for the provision of sidewalks and wheelchair ramps along new facilities and the installation of same in older neighborhoods, where appropriate.

4.3 IMPROVEMENT FUNDING AND IMPLEMENTATION

In order to implement the goals, policies, and objectives of the circulation element, the city should undertake the following implementation strategies:

- Work with appropriate City, County, and State agencies to pursue widening of Via De La Valle, including improvements in the Via De La Valle/Interstate 5 interchange area.
- Develop an interconnect system for all existing and future traffic signals along Lomas Santa Fe Drive to function in a coordinated manner.
- Adopt roadway design standards to conform to the functional classification descriptions included in the circulation element and require that all new facilities be implemented in conformance with those standards. Most existing streets in the city were developed in conformance with County of San Diego Standards, which would serve as a good starting point for the development of Solana Beach Standards. Typical roadway cross sections are shown on Exhibit 5.
- Work with appropriate city, county, and state agencies to pursue improvements to the Lomas Santa Fe Drive/Interstate 5 interchange.
- Program into the City's Capital Improvement Program appropriate plan proposals contained in the circulation element, including the upgrading of existing roadways to appropriate standards.

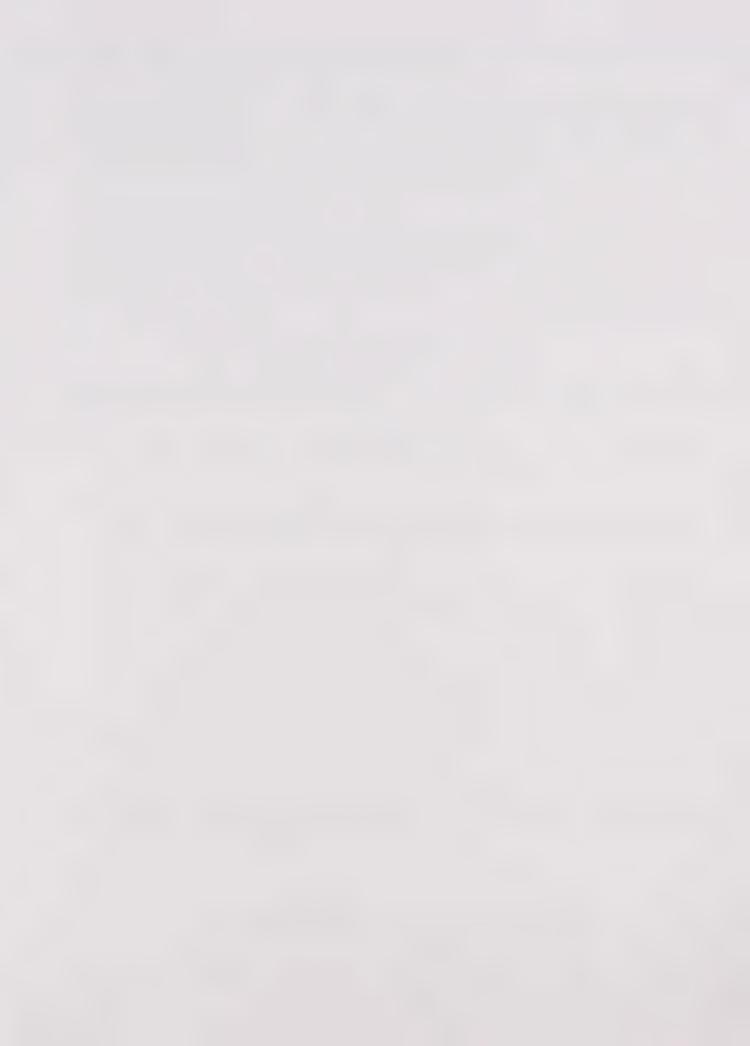


Typical Roadway Cross-Sections



SOURCE: KUNZMAN ASSOCIATES





- Adopt a specific roadway and traffic signal improvement fee to provide an additional source of local funds to finance upgrading of roadway facilities included in the circulation element.
- Develop a program to monitor traffic volumes and levels of service on Solana Beach roadways to facilitate the maintenance of the minimum levels of service specified in the circulation element.
- Adopt a policy which establishes the threshold of significance for determining when the traffic generated by a proposed development will have a significant negative environmental impact. The city should require traffic studies in conjunction with the city's development review process for development proposals.
- Develop a signage program which directs visitors to the Del Mar Fairgrounds to use preferred routes so as to minimize their intrusion into residential areas and their conflicts with local residential road users.
- Develop a phasing program for the implementation of the new roadway facilities shown on Exhibit 4, "The Circulation Plan". The phasing plan should give highest priority to facilities which will provide alternate routes to Lomas Santa Fe Drive for residents' use and which improve safety conditions for motorists and/or pedestrians or bicyclists.



Noise Element



City of Solana Beach General Plan Program

Phillips Brandt Reddick



SOLANA BEACH GENERAL PLAN NOISE ELEMENT

CITY OF SOLANA BEACH 380 Stevens Avenue, Suite 120 Solana Beach, California 92075 (619) 755-2998

Solana Beach City Council

Margaret Schlesinger, Mayor

Jack Moore, Deputy Mayor

Marion Dodson, Council Member

Richard Hendlin, Council Member

Celine Olson, Council Member

Adopted November 14, 1988

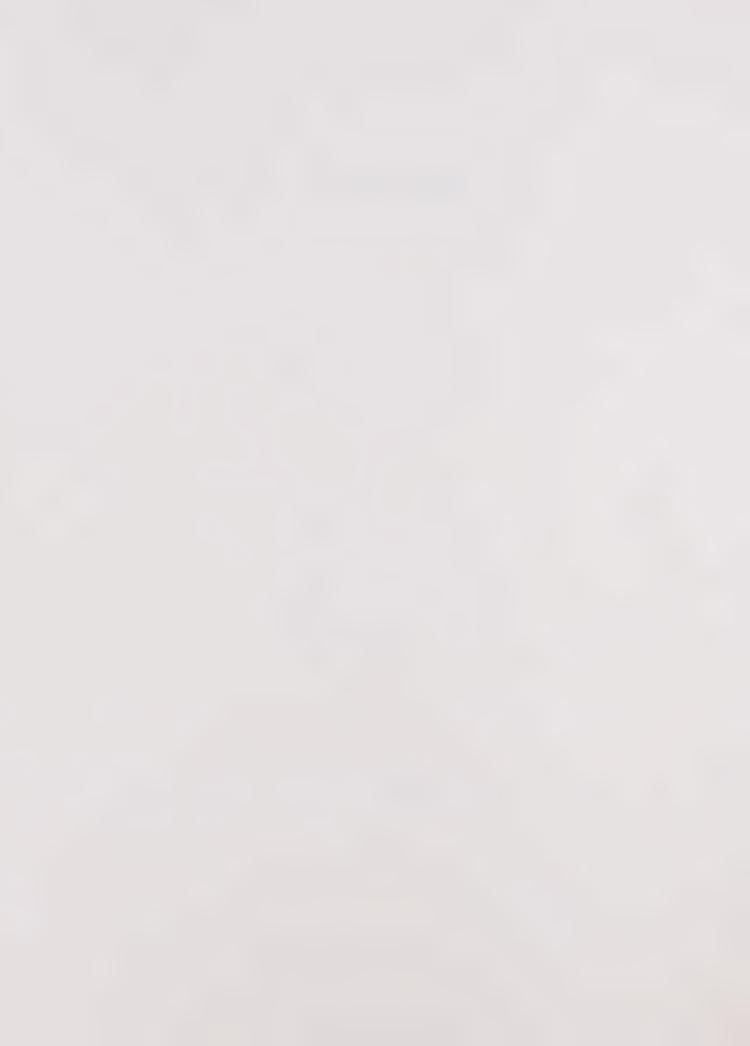


TABLE OF CONTENTS

		Page Number
1.0	INTRODUCTION	1
	1.1 Overview	1
	1.2 Purpose	2
	1.3 Authorization	2
2.0	EXISTING CONDITIONS/ISSUE ANALYSIS	3
	2.1 Definition Of Noise	3
	2.2 Standard and Methods of Measurement	4
	2.3 Existing Acoustic Environment	7
	2.4 Future Acoustic Environment	15
3.0	GOALS, OBJECTIVES AND POLICIES	19
4.0	THE PLAN FOR CONTROL AND MANAGEMENT OF NOISE	21
	APPENDIX A: NOISE MEASUREMENT RESULTS	28

SOLANA BEACH NOISE ELEMENT

1.0 INTRODUCTION

1.1 OVERVIEW

1.1.1 Contents of Element

The Noise Element follows the recently revised State guidelines in the State Government code Section 653021(g) and Section 46050.1 of the Health and Safety Code. The element quantifies the community noise environment in terms of noise exposure contours for both near and long-term levels of growth and traffic activity. The information will become a guideline for the development of land use policies to achieve compatible land uses and provide baseline levels and noise source identification for local Noise Ordinance enforcement.

1.1.2 Key Issues

- 1. Transportation Noise Control Within the City of Solana Beach are a number of transportation related noise sources including freeways, major arterials and collector roadways. In addition a railroad line runs through the City. These sources are the major contributors of noise in Solana Beach. Cost effective strategies to reduce their influence on the community noise environment are an essential part of the Noise Element.
- 2. Community Noise Control for Non-Transportation Noise Sources Residential land uses and areas identified as noise sensitive must be protected from excessive noise from non-transportation sources including commercial and industrial operations. The south side of Solana Beach is impacted by noise from the Del Mar Fairgrounds. These impacts are most effectively controlled through the adoption and application of a City Noise Ordinance.
- 3. Noise and Land Use Planning Integration Information relative to the existing and future noise environment within Solana Beach should be integrated into future land use planning decisions. The Element presents the noise environment in order that the City may include noise impact considerations in development programs. Noise and land use compatibility guidelines are presented, as well as noise standards for new developments.

1.2 PURPOSE

The Noise Element of a General Plan is a comprehensive program for including noise control in the planning process. It is a tool for local planners to use in achieving and maintaining compatible land use with environmental noise levels. The Noise Element identifies noise sensitive land uses and noise sources, and defines areas of noise impact for the purpose of developing programs to ensure that Solana Beach residents will be protected from excessive noise intrusion.

1.3 AUTHORIZATION

The State of California has mandated that each county and city prepare a Noise Element as part of its General Plan. Section 65302(g) of the California Government Code requires specifically:

"(g) A Noise Element shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

Highways and freeways.

Primary arterials and major local streets.

Passenger and freight on-line railroad operations and ground rapid transit systems.

Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation. Local industrial plants, including, but not limited to, railroad classification yards.

Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

Noise contours shall be shown for all of the sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (LDN). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive. The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise. The Noise Element shall include implementation measures and possible solutions that address existing and forseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards."

The State Guidelines for Preparation and Content of Noise Elements of the General Plan indicates that the Noise Element should present the noise environment in terms of noise contours. For those areas identified as containing noise sensitive facilities, the noise environment is determined by monitoring.

2.0 EXISTING CONDITIONS/ISSUE ANALYSIS

2.1 DEFINITION OF NOISE

1. Noise Definitions. Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud; and 20 dBA higher four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud). Examples of various sound levels in different environments are shown in Exhibit 1.

Noise has been defined as unwanted sound and it is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. These criteria are based on such known impacts of noise on people as hearing loss, speech interference, sleep interference, physiological responses and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narratives:

HEARING LOSS is not a concern in community noise problems of this type. The potential for noise induced hearing loss is more commonly associated with occupational noise exposures in heavy industry or very noisy work environments. Noise levels in neighborhoods, even in very noisy airport environs, are not sufficiently loud to cause hearing loss.

SPEECH INTERFERENCE is one of the primary concerns in environmental noise problems. Normal conversational speech is in the range of 60 to 65 dBA

SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS (A-Scale Weighted Sound Levels)

dB(A)	OVER-ALL LEVEL Sound Pressure Level Approx. 0.0002 Microber	COMMUNITY (Outlear)	HOME OR INDUSTRY	LOUDNESS Human Judgment of Different Sound Levels
130	UNCOMPORTABLY	Military Jet Aircraft Take-Off With After-burner From Aircraft Carrier @ 50 Pt. (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
120 110	LOUD	Turbo-Fan Aircraft @ Take Off Power @ 200 Pt. (90)	Riveling Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100	VERY	Jet Plyover @ 1000 Pt. (103) Boeing 707. DC-8 @ 6080 Pt. Before Landing (106) Bell J-2A Helicopter @ 100 Pt. (100)		100 dB(A) \$ Times as Loud
90	LOUD	Power Mower (96) Boeing 737, DC-9 @ 6080 PL Before Landing (97) Motorcycle @25 PL (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Pt. (89) Prop. Airplane Flyover @ 1000 Pt. (88) Diesel Truck, 40 MPH @ 50 Pt. (84) Diesel Train, 45 MPH @ 100 Pt. (83)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	\$0 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Pt. (77) Procway @ 50 Pt. From Pavament Edge, 10:00 AM (76 +or- 6)	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Air Conditioning Unit @ 100 Pt. (60)	Cash Register @ 10 Pt. (65-70) Electric Typewriter @ 10 Pt. (64) Diahwasher (Rinse) @ 10 Pt. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Pt. (50)		50 dB(A) 1/4 as Louid
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
	JUST AUDIBLE	(dB(A) Scale Interrupted)		
10	THRESHOLD OF HEARING			

SOURCE: Reproduced from Melville C. Branch and R. Dale Beland, <u>Outdoor Noise in the Metropolitan Environment</u>, Published by the City of Los Angeles, 1970, p.2.

Solana Beach Noise Element

Exhibit 1

Examples of Typical Sound Levels

and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level. Exhibit 2 shows the impact of noise and speech interference.

SLEEP INTERFERENCE is a major noise concern because sleep is the most noise sensitive human activity. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep disturbance. Note that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep.

PHYSIOLOGICAL RESPONSES are those measurable effects of noise on people which are realized as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent is not known to which these physiological responses cause harm or are signs of harm.

ANNOYANCE is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability. It is also influenced by the perceived need for the sound. For example, a carpenter is not annoyed by the sound of his saw, whereas persons nearby who do not benefit from the work may be annoyed.

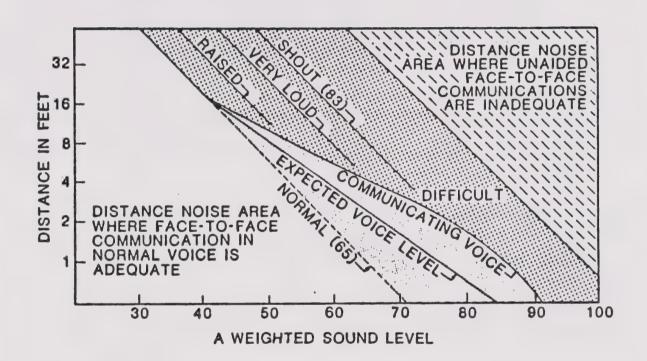
2.2 STANDARDS AND METHODS OF MEASUREMENT

2.2.1 Standards

Community noise is generally not a steady state and varies with time. Under conditions of non-steady state noise, some type of statistical metric is necessary in order to quantify noise exposure over a long period of time. Several rating scales have been developed for describing the effects of noise on people. They are designed to account for the above known effects of noise on people.

Based on these effects, the observation has been made that the potential for noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. These scales are the: Equivalent Noise Level (LEQ), the Day Night Noise Level (LDN), and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs.

LEQ is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the "energy" average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 15 minutes, 1 hour or 24-hours.



LDN is a 24-hour, time-weighted annual average noise level. Time-weighted refers to the fact that noise which occurs during certain sensitive time periods is penalized for occurring at these times. In the LDN scale, those events that take place during the night (10 pm to 7 am) are penalized by 10 dB. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of a day, where sleep is the most probable activity.

CNEL is similar to the LDN scale except that it includes an additional 5 dBA penalty for events that occur during the evening (7pm to 10pm) time period. Either LDN or CNEL may be used to identify community noise impacts within the Noise Element. Examples of CNEL noise levels are presented in Exhibit 3. Although not shown on the exhibit (prepared by the U.S. EPA) suburban residential areas would be at roughly the 60 CNEL level.

The public reaction to different noise levels varies from community to community. Extensive research has been conducted on human responses to exposure of different levels of noise. Exhibit 4 relates LDN noise levels (approximately equal to CNEL noise levels) to community response from some of these surveys. Community noise standards are derived from tradeoffs between community response surveys, such as this, and economic considerations for achieving these levels.

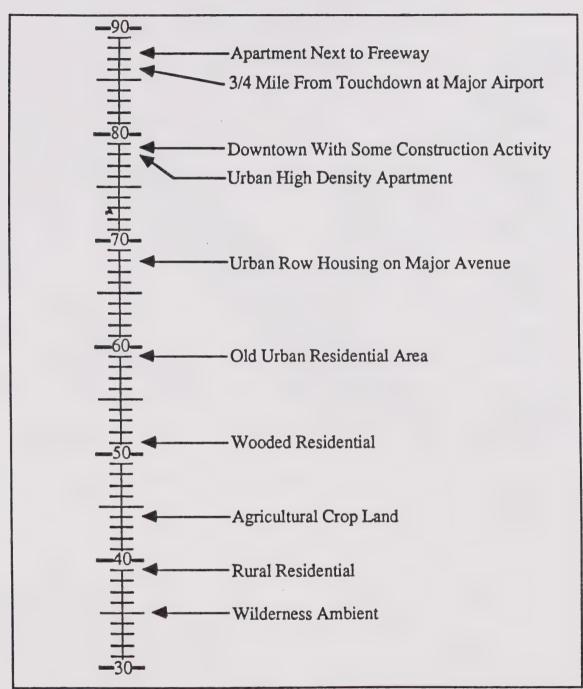
Intermittent or occasional noise such as those associated with stationary noise sources is not of sufficient volume to exceed community noise standards that are based on a time averaged scale such as the LDN scale. To account for intermittent noise, another method to characterize noise is the Percent Noise Level (L%). The Percent Noise Level is the level exceeded X% of the time during the measurement period. Examples of various noise environments in terms of the Percent Noise Levels are shown in Exhibit 5.

Noise Ordinances are typically specified in terms of the percent noise levels. Ordinances are designed to protect people from non-transportation related noise sources such as music, machinery and vehicular traffic on private property. Noise Ordinances do not apply to motor vehicle noise on public streets or other transportation related noise sources that are preempted by the State or Federal government.

Noise/Land Use Compatibility Guidelines. The purpose of this section is to present information regarding the compatibility of various land uses with environmental noise. It is from these guidelines and standards, that the City of Solana Beach Noise Criteria and Standards have been developed. Noise/Land use guidelines have been produced by a number of Federal and State agencies including the Federal Highway Administration, the Environmental Protection Agency, the Department of Housing and Urban Development, the American National Standards Institute and the State of California. These guidelines, presented

CNEL

Outdoor Location



COMMUNITY REACTION

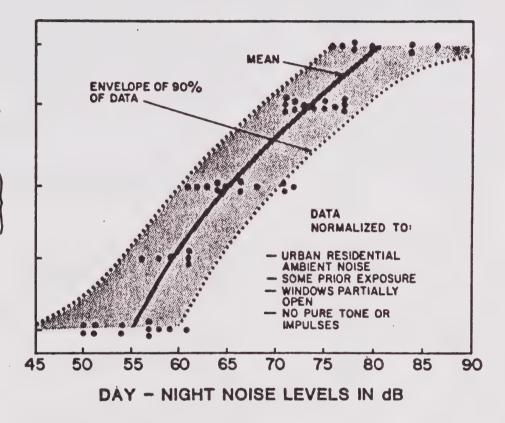
VIGOROUS COMMUNITY ACTION

SEVERAL THREATS OF LEGAL ACTION, OR STRONG APPEALS TO LOCAL OFFICIALS TO STOP NOISE

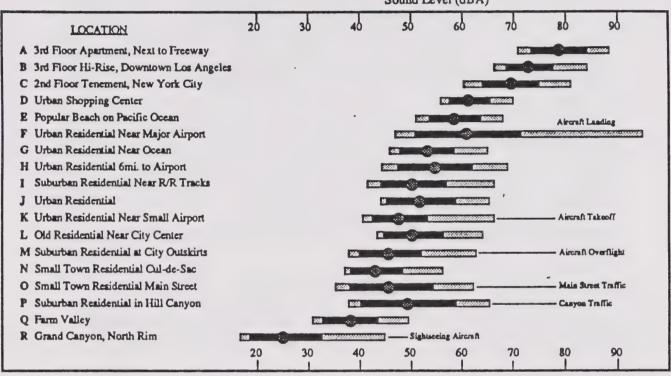
WIDESPREAD COMPLAINTS OR SINGLE THREAT OF LEGAL ACTION

SPORADIC COMPLAINTS

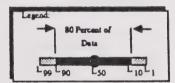
NO REACTION, ALTHOUGH NOISE IS GENERALLY NOTICE ABLE



Sound Level (dBA)



SOURCE: Community Noise, EPA, 1971



in the following paragraphs, are all based upon cumulative noise criteria such as LEQ, LDN or CNEL.

The ENVIRONMENTAL PROTECTION AGENCY published in March 1974 a very important document entitled "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety" (EPA 550/9-74-004). Exhibit 6 presents a table of land uses and requisite noise levels. In this table, 55 LDN is described as the requisite level with an adequate margin of safety for areas with outdoor uses, this includes residences, and recreational areas. The EPA "levels document" does not constitute a standard, specification or regulation, but identifies safe levels of environmental noise exposure without consideration for economic cost for achieving these levels.

The FEDERAL HIGHWAY ADMINISTRATION (FHWA) has adopted and published noise abatement criteria for highway construction projects. The noise abatement criteria specified by the FHWA are presented in Exhibit 7 in terms of the maximum one hour Noise Equivalent Level (LEQ). The FHWA noise abatement criteria basically establishes an exterior noise goal for residential land uses of 67 LEQ and an interior goal for residences of 52 LEQ. The noise abatement criteria applies to private yard areas and assumes that typical wood frame homes with windows open provide 10 dB noise reduction (outdoor to indoor) and 20 dB noise reduction with windows closed.

The STATE OF CALIFORNIA requires each City and County to adopt Noise Elements of their General Plans. Such Noise Elements must contain a Noise/Land Use compatibility matrix. A recommended (but not mandatory) matrix is presented in the "Guidelines for the Preparation and Content of Noise Elements of the General Plan," (Office of Noise Control, California Department of Health, February 1976). Exhibit 8 presents this recommended matrix.

2.2.2 Methods of Measurement

Methodology. The noise environment in Solana Beach was determined through the employment of a comprehensive noise measurement survey of existing noise sources and incorporating these results into computer noise models to model the noise environment (it is, of course, impossible to measure future noise levels so we must rely on computer noise models for future noise estimates). The noise environment is commonly presented graphically in terms of lines of equal noise levels, or noise contours. The following paragraphs detail the methodology used in the measurement survey and computer modeling of these results into noise contours.

Measurement Procedure. Twenty sites were selected for measurement of the noise environment in Solana Beach. Discussions with City staff and identification of major noise sources in the community provided the initial base for development of the community noise survey. The measurement locations were selected on the basis of proximity to major noise sources and noise sensitivity of the land use.

		Indo		To Protect		door	To Protect
	Measure	Activity Inter- ference	Hearing Loss Considera- tion	Against Both Ef- fects (b)	Activity Inter- ference	Hearing Loss Considera- tion	Against Both Ef- fects (b)
Residential with Out-	Ldn	45		45	55		55
Residences	Leq(24)		70			70	
Residential with No Outside Space	Ldn	45		45			
outside Space	Ley(24)		70				
Commercial	Leq(24)	(a)	70	70(c)	(a)	70	70(c)
Inside Transportation	Leq(24)	(a)	70	(2)			
Industrial	Leq(24)(d)	(a)	70	70(c)	(a)	70	70(c)
Hospitals	Ldn	. 45		45	55		55
	Leq(24)		70			70	
Educational	Leq(24).	45		45	55		55
	Leq(24)(d)		70			70	
Recreational Areas	Leq(24)	(a)	70	70(c)	(a)	70	70(c)
Farm Land and General Unpopulated Land	Leq(24)				(a)	70	70(c)

Code:

- a. Since different types of activities appear to be associated with different levels, identification of a maximum level for activity interference may be difficult except in those circumstances where speech communication is a critical activity.
- b. Based on lowest level.
- c. Dused only on hearing loss.
- d. An Leq(8) of 75 dB may be identified in these situations so long as the exposure over the remaining 16 hours per day is low enough to result in a negligible contribution to the 24-hour average, i.e., no greater than an Leq of 60 dB.

Note: Explanation of identified level for hearing loss: The exposure period which results in hearing loss at the identified level is a period of 40 years.

*Refers to energy rather than arithmetic averages.

SOURCE : EPA

ACTIVITY CATEGORY	DESIGN NOISE LEVEL - LEQ	DESCRIPTION OF ACTIVITY CATEGORY
A	57 (Exterior)	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
В	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas and parks which are not included in category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.
С	72 (Exterior)	Developed lands, properties, or activities not included in Category A or B above.
D	-	For requirements of undeveloped lands see FHWA PPM 773.
Е	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Land Use Category	Community Noise Exposure Ldn or CNEL, dB 55 60 65 70 75 80
Residential - Low Density Single Family, Duplex, Mobile Homes	
Residential - Multiple Family	
Transient Lodging - Motels, Hotels	
Schools, Libraries, Churches Hospitals, Nursing Homes	
Auditoriums, Concert Halls, Amphitheatres	
Sports Arena, Outdoor Spectator Sports	
Playgrounds, Neighborhood Parks	
Golf Courses, Riding Stables Water Recreation, Cemeteries	
Office Buildings, Business Commercial and Residential	
Industrial, Manufacturing Utilities Agriculture	

Interpretation

Normally Acceptable

Specified Land Use is Satisfactory, Based Upon the Assumption that Any Buildings Involved are of Normal Conventional Construction, Without Any Special Noise Insulation Requirements.

Conditionally Acceptable

New Construction or Development Should be Undertaken Only After a Detailed Analysis of the Noise Reduction Requirement is Made and Needed Noise Insulation Features Included in the Design. Conventional Construction, but with Closed Windows and Fresh Air Supply Systems or Air Conditioning, Will Normally Suffice.

Normally Unacceptable

New Construction or Development Should Generally be Discouraged. If New Construction or Development Does Proceed, a Detailed Analysis of the Noise Reduction Requirements Must be Made and Needed Noise Insulation Features Included in the Design.

Clearly Unacceptable

New Construction or Development Should Generally not be Undertaken. The measurement locations are presented in Exhibit 9. The Solana Beach Noise Element measurement survey utilized the Bruel and Kjaer Model 4427 Portable Noise Monitor. This instrument automatically calculates the Equivalent Noise Level (LEQ), maximum noise levels and various percentile noise levels for any specific time period. The system was calibrated with a Bruel and Kjaer calibrator with calibration traceable to the National Bureau of Standards. Calibration for the calibrator is certified through the duration of the measurements by Bruel & Kjaer. This measurement system satisfies the ANSI (American National Standards Institute) Standards 1.4 for Type 1 precision noise measurement instrumentation.

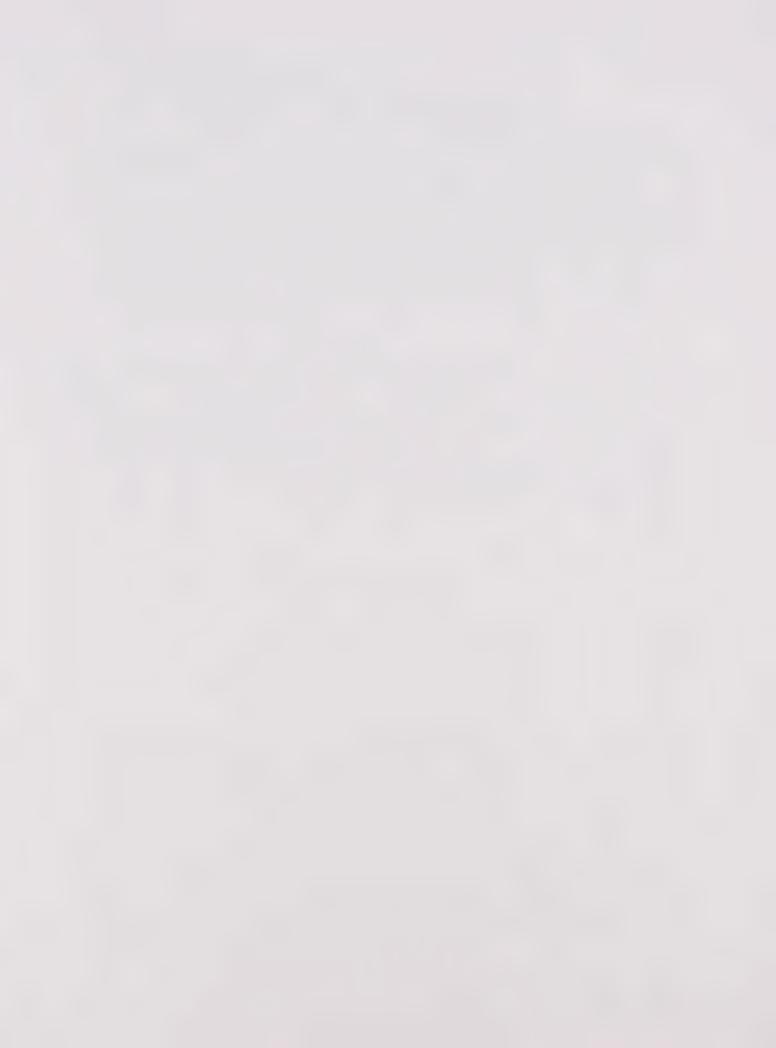
Measurement Results. The noise measurement program was conducted from September 10, 1987 to September 11, 1987 at 21 locations throughout the City. A measurement period of 15 minutes was used for the survey. The results of the ambient noise measurements at each site are presented as Appendix A. The measurement data also identifies the date and time of the measurement and the primary noise source affecting the noise environment. The quantities measured were the Equivalent Noise Level (LEQ), the maximum noise level and several percentile noise levels ranging from 1 to 99%.

2.3 EXISTING ACOUSTIC ENVIRONMENT

This section contains a detailed description of the current noise environment within the City. This description of the noise environment is based on an identification of noise sources and noise sensitive land uses, a community noise measurement survey and noise contour maps.

To define the noise exposure, this section of the report first identifies the major sources of noise in the community. The sources of noise in Solana Beach include: Interstate 5, Highway 101, arterial roadways, the Atchinson Topeka and Santa Fe Railroad line, and the Del Mar Fairgrounds located in Del Mar adjacent to the southern boundary of Solana Beach. In addition, noise levels within the the City are affected by overflights from military, commercial, and general aviation aircraft. To completely assess the noise environment in the City, noise sensitive receptors must also be identified. As mandated by the State, noise sensitive receptors include, but are not limited to, residential areas, areas containing schools, hospitals, rest homes, long-term medical or mental care facilities, or any other land use areas deemed noise sensitive by the local jurisdiction.





2.3.1 Noise Sources and Levels

The predominant land use in the City is residential, and should also be considered the most noise sensitive. Other noise sensitive land uses include schools and parks. Maintenance of a relatively quiet ambience is important to maintaining the overall atmosphere of the area.

The predominant noise source in Solana Beach originates from motor vehicles. Several major arterial roadways pass through the City. The primary roadways of concern are Interstate 5 and Highway 101. The Atchinson Topeka and Santa Fe Railroad line runs parallel to Highway 101 and is also considered a primary concern. The other major sources of noise are not found within the city but have a significant effect on the City's noise environment.

Del Mar Fairgrounds is located on state property adjacent to the southern boundary of Solana Beach and impacts City residences. Previously, a analysis of the raceway's impact on Solana Beach was undertaken ("Measurement of Grand Prix Raceway Noise in the City of Solana Beach", Mestre Greve Associates, October 30, 1987). The report provided results of noise measurements taken in residential areas of Solana Beach during the Grand Prix races at Del Mar Fairgrounds. The report stated that the raceway alone did not violate the Noise Ordinance but a combination of freeway traffic, aircraft flyovers and raceway noise exceeded the ordinance on several occasions (at the time of the study, results were compared to the Noise Ordinance for San Diego County which is presently used by Solana Beach). Noise originating from the fairgrounds during auto / horse races is intermittant type noise. The primary entrance and exit routes utilize roadways bordering or within Solana Beach; primarily Via De La Valle, Jimmy Durante Boulevard and Highway 101. The fairgrounds is operated by the State on State property. Therefore, noise ordinances adopted by Solana Beach (or the City of Del Mar) will not be able to control the noise generated at the fairgrounds since it is outside the Cities' jurisdiction. However, recent court cases are testing the legality of imposing their noise ordinance on activities on State property. Most notable, is the recent court actions by the City of Costa Mesa against Pacific Amphitheatre and the State of California. The City has been trying to impose it's noise ordinance on the amphitheatre which is operated on State property. The court cases are still in progress, but could set new precedents in this area.

An acoustical report prepared by Mr. Raymond Sacco (Sound Level Monitoring of Grand Prix at Del Mar Auto Race, November 12, 1987, Raymond Sacco, Assistant Noise Control Officer) sums up the situation as follows:

In summary, noise impact from automobile racing activity was greater than other activities conducted on the fairgrounds and would exceed the noise standards as adopted by the City of Del Mar and the City of Solana Beach, but due to the special status of the fairgrounds, local standards are not applicable. The predicted noise levels in the Environmental Impact Report were used as the standard not to be exceeded and monitoring data shows that the noise produced by the auto racing activities were less than predicted and therefore in conformance to the requirements.

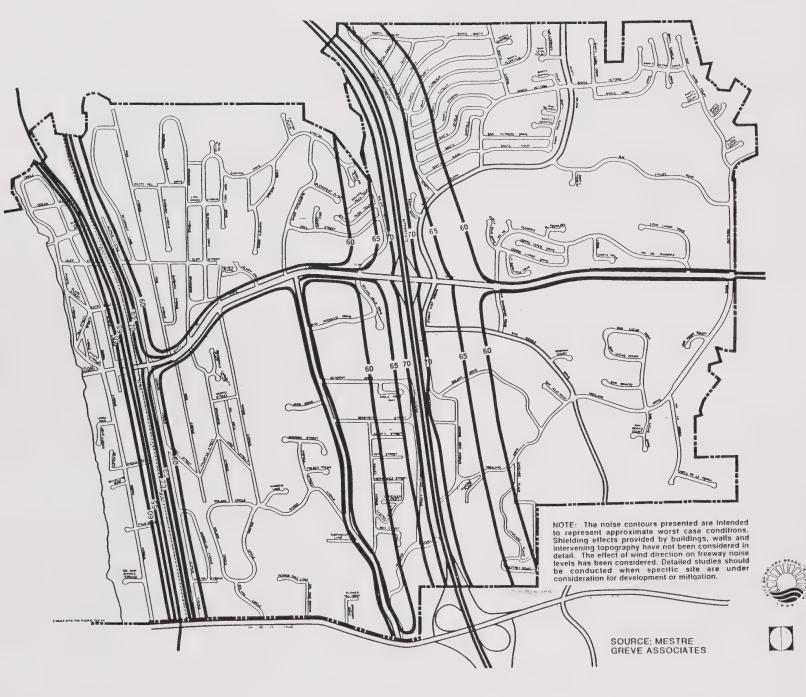
Additional monitoring of fairground activities is needed. It has been observed that when the wind blows from the south or east, that the wind carries the noise towards Solana Beach better and higher noise levels in residential areas result. Winds from the south or east may cause the fairgrounds noise to exceed noise ordinance limits in Solana Beach.

Several studies have been previously prepared addressing the potential noise impacts of the fairground activities. These studies include the "Environmental Noise Study for Southern California Grand Prix," (prepared by Gordon Bricken & Associates, January 7, 1986).

Aircraft flyovers occur over Solana Beach several times throughout the day. The aircraft consist of military, commercial, and general aviation types (both fixed and rotary wing) originating from various airports. Aircraft flights occur over residential and other noise sensitive land uses within the City. The aircraft flyovers do not contribute significantly to the overall noise level, but can be annoying on a short term basis. Future agreements with military, commercial and private airport operators may provide the opportunity for more stringent flight paths over the city. It would be desirable to confine aircraft flight corridors in the area to less sensitive land uses such as at least 1 mile off the coast. Flights out over the ocean would have virtually no impact on the City.

The noise environment for Solana Beach can be described using noise contours developed for the major noise sources within the City. The major noise source impacting the City is traffic noise. Existing and future noise contour maps have been developed for the City as part of this noise element.

The traffic noise contours for existing conditions are presented on Exhibit 10. (This map is



Existing CNEL Noise Contours SOLANA BEACH GENERAL PLAN CITY OF SOLANA BEACH









available for review at the City at 1" = 1000' scale.) The noise contours in a tabular format are presented in Table 2. The 60, 65 and 70 CNEL contour levels are shown on the map. These traffic noise levels were computed using the Highway Noise Model published by the Federal Highway Administration ("FHWA Highway Traffic Noise Prediction Model," FHWA-RD-77-108, December 1978). The FHWA Model uses traffic volume, vehicle mix, vehicle speed, and roadway geometry to compute the LEQ noise level. A computer code has been written which computes equivalent noise levels for each of the time periods used in CNEL. Weighting these noise levels and summing them results in the CNEL for the traffic projections used. The traffic data used to project these noise levels are derived from the Circulation Element for the City. The traffic mixes and time distributions for the arterials are presented in Table 1. The traffic mix data for the arterials are based on measurements for roadways in Southern California and are considered typical for arterials in this area. The existing and future contour maps include railroad noise contours from the tracks that run parallel to Highway 101.

Table 1
TRAFFIC DISTRIBUTION PER TIME OF DAY
IN PERCENT OF ADT

	PERCENT OF ADT					
VEHICLE TYPE	DAY	EVENING	NIGHT			
A . 1 *1	25.51	10.55	0.24			
Automobile	75.51	12.57	9.34			
Medium Truck	1.56	0.09	0.19			
Heavy Truck	0.64	0.02	0.08			

Most cities have adopted 65 CNEL for outdoor living areas and 45 CNEL for indoor areas. The noise contour map indicates that currently and in the future 65 CNEL is only exceeded significantly along Highway 101 (in combination with the railroad line) and Interstate 5. The remaining portions of the City experience noise levels generally of 60 CNEL or less.

Table 2
EXISTING (1988) TRAFFIC NOISE CONTOURS

Roadway	ADT (,000)	Speed	Distance to 70 CNEL		
CEDROS AVENUE Cliff to Via De La Valle	2.0	35	7	15	33
STEVENS AVENUE Lomas Santa Fe to Via De La Valle	10.8	40	27	58	126
LOMAS SANTA FE DRIVE Highway 101 to I-5 I-5 to El Camino Real	22.3 8.5	45 45	53 28	115 60	247 130
VIA DE LA VALLE Highway 101 to Jimmy Durant Jimmy Durante to I-5 I-5 to El Camino Real	e 16.6 43.0 18.4	45 45 45	44 82 47	94 178 101	203 383 217
HIGHWAY 101 South of Via De La Valle Via De La Valle to City Line North of City Line	18.3 17.5 25.0	45 45 45	47 45 57	100 98 124	217 210 267
INTERSTATE 5 South of Via De La Valle Via De La Valle to Santa Fe North of Lomas Santa Fe	169.0 156.0 158.0	55 55 55	363 344 347	782 741 747	1685 1597 1611

ADT - Average Daily Traffic based on 1987 traffic counts. Speed - Speed is in miles per hour.

An Atchinson, Topeka, and Santa Fe railroad line lies next to Highway 101. To determine train noise levels at various distances the Wyle Model was used ("Assessment of Noise Environments Around Railroad Operations," Wyle Laboratories Report WCR 73-5, July 1973). The noise generated by the train pass-by can be divided into two components; that

generated by the engine or locomotive, and that due to the railroad cars. The characteristic frequency of the engine is different than for the cars. The noise generated by the engine is the result of the mechanical movements of the engine parts, the combustion process of the horn if used, and to a lesser extent the exhaust system. The noise generated by the cars is a result of the interaction between the wheels and the railroad track. A zero source height is used for the car noise, and a source height of 10 feet is utilized for the locomotive.

Data on railroad operations were obtained from Mr. Jim Beard of the San Bernardino office of the A.T. and S.F. Railway line. The railroad line is used for both Amtrak and freight train operations. Amtrak operations consist of 16 trains per day passing through the City with an average of 8 cars per train. An average of 3 freight trains per day typically pass through the City with 50 cars per train. A speed of 90 miles per hour is typical for the Amtrak trains and 55 miles per hour for freight trains. The operational data was utilized in conjunction with the Wyle Model to project train noise levels on the project site. The results of the train noise projections are displayed in Table 3 in terms of CNEL noise levels at distances of 100, 200, 500, and 1000 feet from the tracks. Railroad noise sources must be addressed in terms of the CNEL scale as per the State requirements. The projections do not include topography or barriers which may reduce the noise levels.

Table 3
RAILROAD NOISE LEVELS

DISTANCE (FEET)	100	200	500	1,000
CNEL (DB)	70	66	58	53

Railroad noise levels are expected to remain virtually unchanged in future years. However, there are no guarantees that operations will not change. Freight operations may increase, Amtrak may increase passenger service, and private ventures may attempt to provide high speed rail service. Any significant changes in operations should be preceded by the required environmental documentation addressing potential impacts and mitigation measures. Railroad levels and traffic levels for Highway 101 were combined to achieve the existing and future contour distances along the tracks. Potential future mitigation of the railroad noise may include lowering the rail bed.

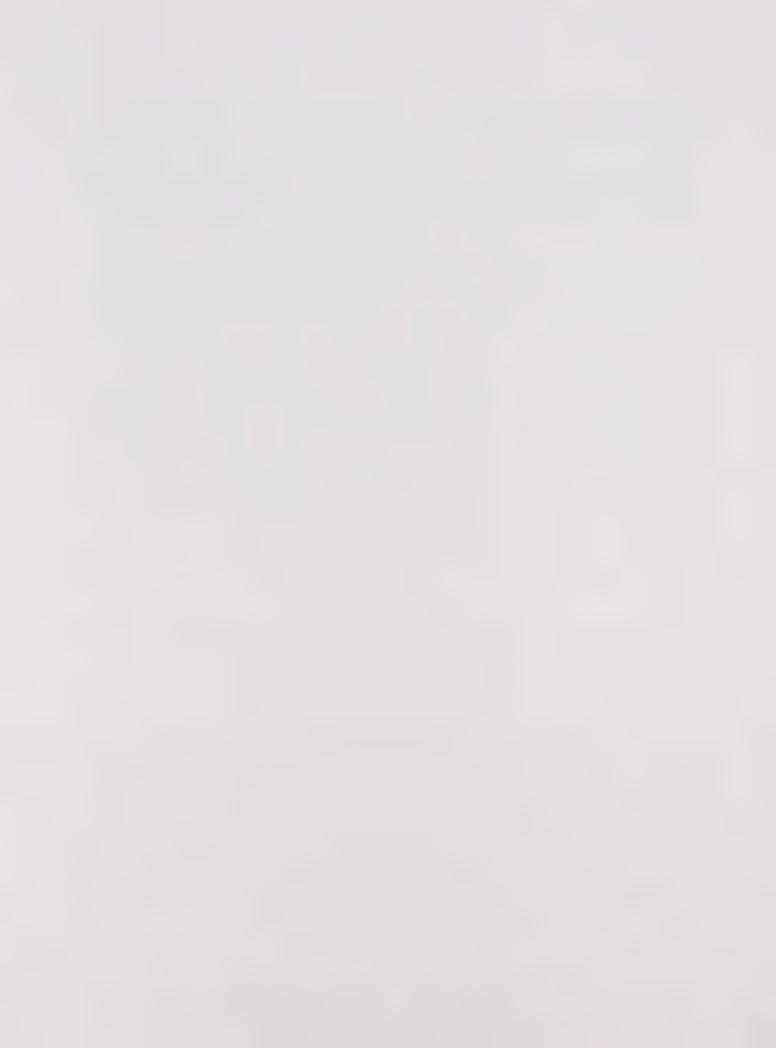
2.3.2 Noise Sensitive Land Uses

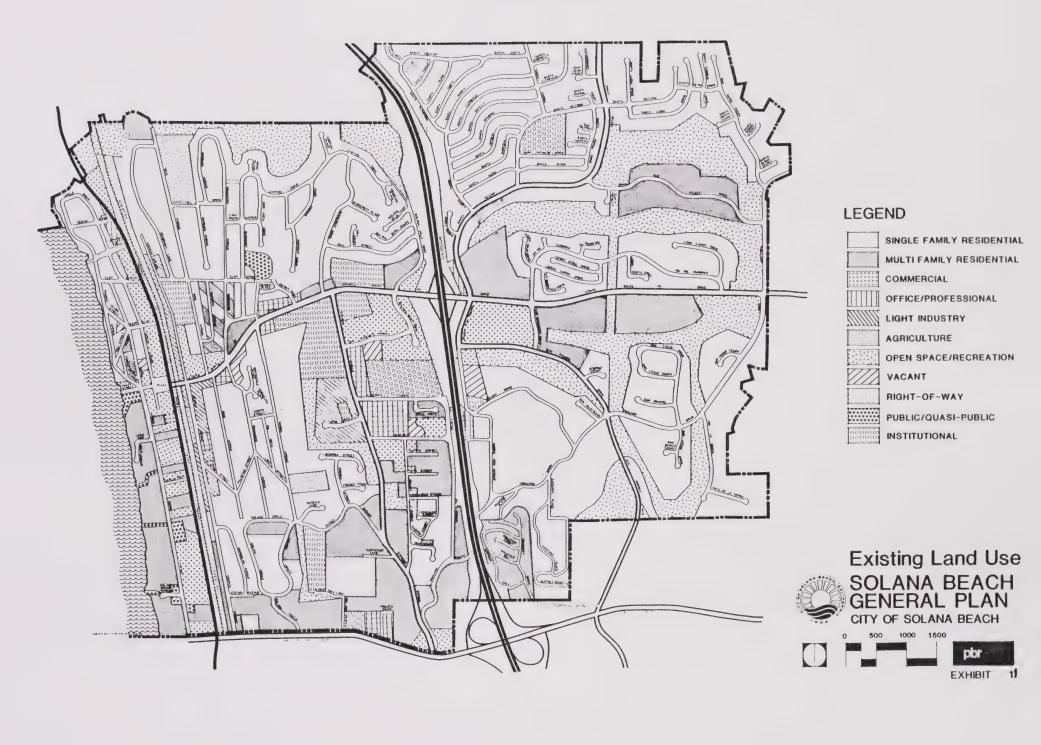
The most noise sensitive land use in Solana Beach is residential development. It is considered especially noise sensitive because (1) considerable time is spent by individuals at home, (2) significant activities occur outdoors, and (3) sleep disturbance is most likely to occur in a residential area. Additionally, the City of Solana Beach has a number of public and private educational facilities, and churches that are considered noise sensitive. The location of residential areas, schools, and parks are shown on the Existing Land Use Map (Exhibit 11). The distribution of these facilities varies from quiet residential areas to major arterial roadways.

Four schools are located within Solana Beach. Two of the schools are located along Lomas Santa Fe Drive at Stevens Avenue. These two schools are located along major roadways and subsequently portions of these school sites experience high noise levels. However, the schools have the buildings located back from the roadways which act to reduce the noise levels somewhat. School Districts have been able to apply to the State for funds to mitigate noise problems for many years. The funds are used to sound insulate classrooms and to provide ventilation or air conditioning so that windows may remain closed. The other two schools are located on East Cliff Street at Rios Avenue and at Santa Victoria near Santa Carina. These schools are located in areas where the noise levels do not appear to be excessive.

The San Elijo Lagoon merits special consideration. Due to its natural condition it should be considered as noise sensitive. However, the wetlands area is located outside the City of Solana Beach. Actions by the City should take into consideration the noise sensitive nature of this area.

Noise contours represent lines of equal noise exposure, just as the contour lines on a topographic map are lines of equal elevation. The contours shown on the maps are the 70, 65, and 60 CNEL noise level for the traffic and railroad noise contours. The noise contours presented should be used as a guide for land use planning. The 60 CNEL contour defines the Noise Referral Zone. This is the noise level for which noise considerations should be included when making land use policy decisions. The 65 CNEL contour describes the areas for which new noise sensitive developments will be permitted only if appropriate mitigation measures are included such that the standards contained in this Element are achieved.





The contours presented in this report are a graphic representation of the noise environment. Topography and intervening buildings or barriers have a very complex effect on the propagation of noise. This topographic effect is not included in these contours.

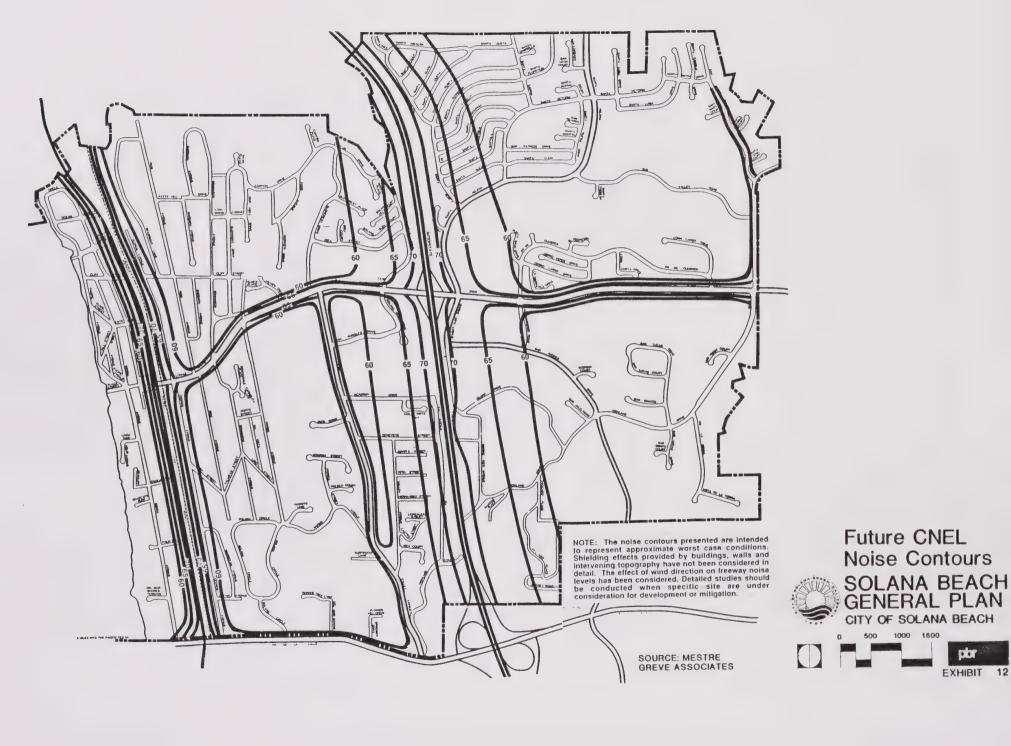
2.4 FUTURE ACOUSTIC ENVIRONMENT

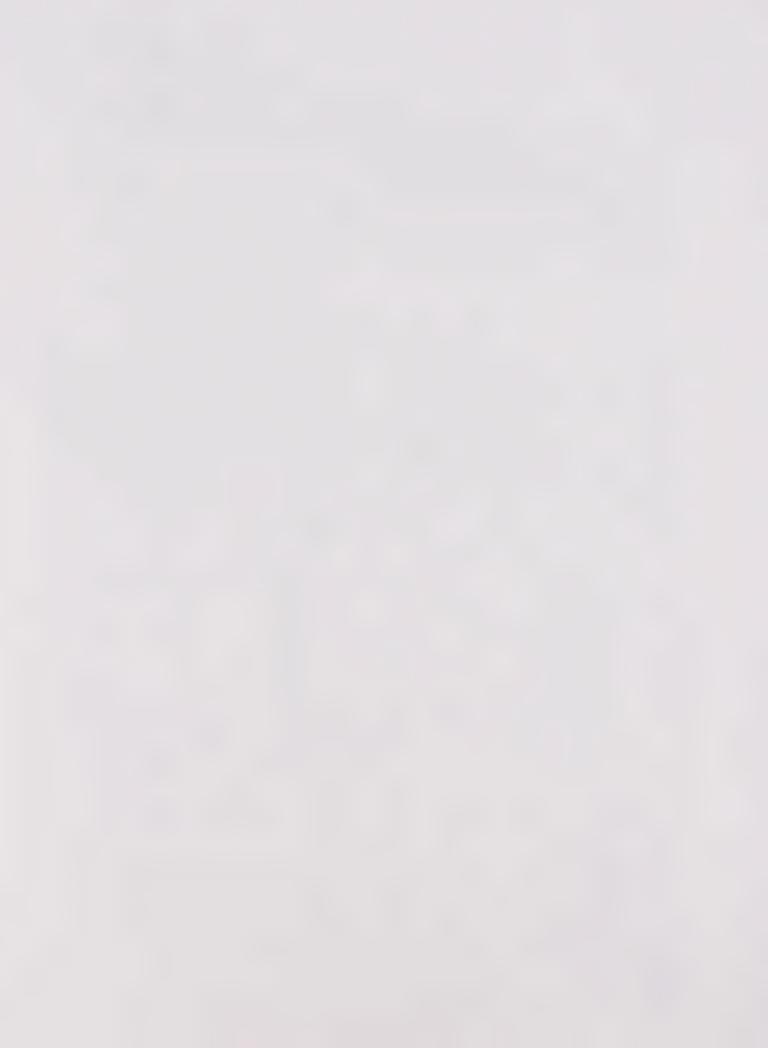
2.4.1 Noise Sources and Levels

Future traffic noise levels have been computed using the FHWA Highway Traffic Noise Prediction Model and projected traffic volumes presented in the circulation element. Table 4 and Exhibit 12 show the traffic noise contours along the city's principal highways that are projected to occur following buildout of the proposed general plan.

Table 4 FUTURE TRAFFIC NOISE CONTOURS (YEAR 2010)

Roadway A	ADT (,000)	Speed	Distance to 70 CNEI	o CNEL C L 65 CNE		
CEDROS AVENUE Cliff to Via De La Valle	4.0	35	11	24	52	
STEVENS AVENUE Lomas Santa Fe to Via De La Valle	17.0	40	37	7 9	170	
SAN ANDRES DRIVE Marine View to Highland Highland to Via De La Valle	5.0 e 7.0	40 40	16 20	35 44	75 94	
SANTA HELENA North of Lomas Santa Fe	6.0	40	18	39	85	
SAN MARLO DRIVE North of Lomas Santa Fe	8.0	40	22	48	103	
HIGHLAND DRIVE San Andres to Lomas Santa	Fe 4.0	40	14	30	65	
LOMAS SANTA FE DRIVE East of Highway 101 West of Stevens Stevens to I-5 I-5 to Highland Highland to El Camino Real	16.0 24.0 36.0 29.0 12.0	45 45 45 45 45	43 56 73 63 35	92 120 158 137 76	198 259 340 294 163	
VIA DE LA VALLE Highway 101 to Jimmy Dura Jimmy Durante to I-5 I-5 to San Andres San Andres to El Camino Re	45.0 35.0	45 45 45 45	49 85 72 62	107 183 155 133	230 395 334 288	
HIGHWAY 101 South of Via De La Valle Via De La Valle to City Line North of City Line	27.0 28.0 31.0	45 45 45	60 62 66	130 133 143	281 288 308	
SAN DIEGO FREEWAY South of Via De La Valle Via De La Valle to	274.0 266.0	55 55	501 491	1079 1058	2325 2279	
Lomas Santa Fe North of Lomas Santa Fe	265.0	55	490	1055	2274	



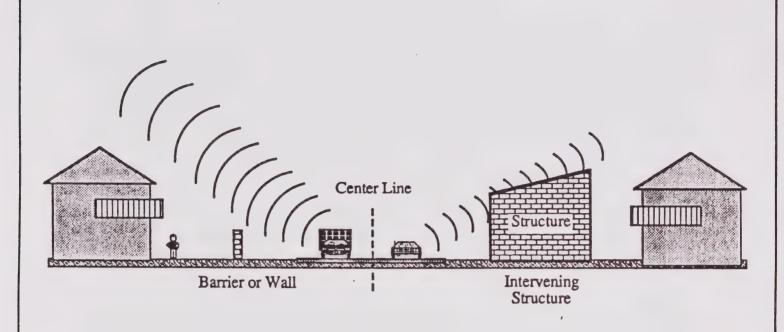


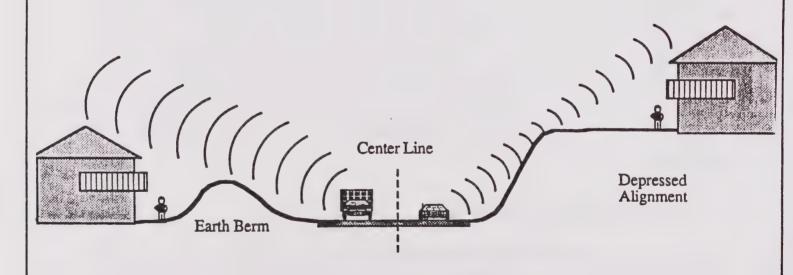
Based on current and future traffic levels the only areas of the City that experiences noise levels in excess of 65 CNEL is along Interstate 5 and Highway 101. Much of the land uses along Highway 101 are commercial or business uses which are generally considered insensitive to noise. However, there are some multi-family residential uses along this road which are considered noise sensitive. Several single and multi-family residential areas lie in close proximity to Interstate 5. Several of the residential areas are protected from freeway noise by existing noise barriers. However, residences exist on hills overlooking the freeway that are unprotected from freeway noise. Therefore, future planning for the City should be directed at reducing noise levels along Highway 101 and Interstate 5 and limiting the future siting of noise sensitive land uses along these areas.

As previously discussed, the sources of noise in Solana Beach can be divided into two basic categories, transportation sources (primarily traffic) and non-transportation sources. A local government has little direct control of transportation noise at the source. State and Federal agencies have the responsibility to control the noise from the source, such as vehicle noise emission levels. The most effective method the City has to mitigate transportation noise is through reducing the impact of the noise onto the community (i.e. noise barriers and site design review). Mitigation through the design and construction of a noise barrier (wall, berm, or combination wall/berm) is the most common way of alleviating traffic noise impacts (Exhibit 13). The effect of a noise barrier is critically dependent on the geometry between the noise source and the receiver. A noise barrier effect occurs when the "line of sight" between the source and receiver is penetrated by the barrier. The greater the penetration the greater the noise reduction.

2.4.2 Noise/Land Use Compatibility

Noise concerns should be incorporated into land use planning to reduce future noise and land use incompatibilities. This is achieved by establishing standards and criteria that specify acceptable limits of noise for various land uses throughout the City. These criteria are designed to integrate noise considerations into land use planning to prevent noise/land use conflicts. Exhibit 14 presents criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the basis for the development of specific Noise Standards. The proposed standards, presented in Exhibit 15, represent City policies related to land uses and acceptable noise levels. These tables are the primary tools which allow the City





Solana Beach Noise Element

MESTRE GREVE ASSOCIATES

Exhibit 13
Examples of Noise Barrier Effect

LAND USE CATEGORIES		COMMUNITY NOISE EQUIVALENT LEVEL						
CATEGORIES	USES	≤55 60 65 70 75 80≥						0>
RESIDENTIAL	Single Family, Duplex, Multiple Family	Α	Α	В	В	С	D	D
RESIDENTIAL	Mobile Home	Α	Α	В	С	С	D	D
COMMERCIAL Regional, District	Hotel, Motel, Transient Lodging	Α	Α	В	В	С	С	D
COMMERCIAL Regional, Village District, Special	Commercial Retail, Bank Restaurant, Movie Theatre	Α	Α	Α	Α	В	В	C
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	В	В	С	D
COMMERCIAL Recreation INSTITUTIONAL Civic Center	Amphitheatre, Concert Hall Auditorium, Meeting Hall	В	В	С	С	D	D	D
COMMERCIAL Recreation	Childrens Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	Α	Α	В	В	D	D
COMMERCIAL General, Special INDUSTRIAL, INSTITUTIONAL	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	Α	Α	Α	A	В	В	В
INSTITUTIONAL General	Hospital, Church, Library Schools' Classroom	Α	Α	В	С	С	D	D
OPEN SPACE	Parks	Α	Α	Α	В	С	D	D
OPEN SPACE	Golf Course, Cemetaries, Nature CentersWildlife Reserves, Wildlife Habitat	Α	Α	A	Α	В	С	С
AGRICULTURE	Agriculture	A	А	Α	Α	А	A	Α

INTERPRETATION

ZONE A CLEARLY COMPATIBLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

ZONE B
NORMALLY COMPATIBLE

New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

ZONE C NORMALLY INCOMPATIBLE New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

ZONE D CLEARLY INCOMPATIBLE New construction or development should generally not be undertaken.

Solana Beach Noise Element

Exhibit 14

Noise / Land Use Compatibility Matrix

LAND USE CATEGORIES		ENERGY AV	ERAGE CNEL
CATEGORIES	USES	INTERIOR 1 E	XTERIOR 2
RESIDENTIAL	Single Family, Duplex, Multiple Family	45 ³ 55 ⁴	65
	Mobile Home	00000	65 ⁵
COMMERCIAL INDUSTRIAL	Hotel, Motel, Transient Lodging	45	65 ⁶
INSTITUTIONAL	Commercial Retail, Bank Restaurant	55	****
	Office Building, Research and Development, Professional Offices, City Office Building	50	*****
	Amphitheatre, Concert Hall Auditorium, Meeting Hall	45	****
	Gymnasium (Multipurpose)	50	00000
	Sports Club	55	****
	Manufacturing, Warehousing, Wholesale, Utilities	65	0000
	Movie Theatres	45	****
INSTITUTIONAL	Hospital, Schools' dassroom	45	65
	Church, Library	45	*****
OPEN SPACE	Parks	*******	65

INTERPRETATION

- 1. Indoor environment excluding: Bathrooms, tollets, closets, corridors.
- 2. Outdoor environment limited to: Private yard of single family

Multi-family private patio or balcony which is served by a means of exit from inside.

Mobile home Park Hospital patio Park's picnic area School's playground

... Hotel and motel recreation area

- Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
- 4 Noise level requirement with open windows, if they are used to meet natural ventilation requirement.
- 5. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
- 6. Except those areas affected by aircraft noise.

to ensure integrated planning for compatibility between land uses and outdoor noise.

The most effective method to control community noise impacts from non-transportation noise sources is through application of the Community Noise Ordinance. The City presently uses the Noise Ordinance for San Diego County. The San Diego County ordinance is a good guideline and has served the City for the past several years. In addition, the Orange County Noise Ordinance is also a good guideline, is used by many jurisdictions throughout the State of California, and is considered to be one of the finest noise ordinances in the nation. The San Diego County ordinance addresses noise in terms of the average (Leq) noise level. The Orange County Ordinance also addresses peak and intermittant sounds in addition to average levels.

3.0 GOALS, OBJECTIVES, AND POLICIES

GOAL 3.1

TO PROTECT PUBLIC HEALTH AND WELFARE BY ELIMINATING EXISTING NOISE PROBLEMS AND BY PREVENTING SIGNIFICANT DEGRADATION OF THE FUTURE ACOUSTIC ENVIRONMENT.

Objective 1.0

Establish a community noise standard that specifies acceptable limits of noise for various land uses throughout the city.

<u>Policy 1.a</u> The city shall adopt a standards by which identifies interior and exterior noise standards in relation to specific land uses, particularly "noise sensitive" areas such as residential areas, schools, hospitals, open space preserves, and parks. The ordinance shall specify the maximum allowable noise levels for transportation sources, construction activities, and other non-transportation sources such as industrial and commercial land uses.

<u>Policy 1.b</u> The adopted community noise standards shall be consistent with applicable state noise standards which specify that interior noise levels for residential living spaces shall not exceed 45 Ldn/CNEL. This standard shall be applied to all new single- and multi-family dwellings, hotels, and motels.

<u>Policy 1.c</u> The adopted community noise standards shall designate the code enforcement officer as the noise control coordinator and shall establish the respective responsibilities and police powers of all city departments involved in noise abatement.

<u>Policy 1.d</u> The city shall encourage a long-term development pattern which minimizes noise conflicts through planning and zoning.

Objective 2.0

Establish measures by to control noise impacts from transportation related noise sources.

<u>Policy 2.a</u> The city shall require the construction of barriers to mitigate sound emissions where necessary and feasible.

Policy 2.b The city shall require the inclusion of noise mitigation measures in the design of new roadway projects in Solana Beach, including Interstate 5 projects.

<u>Policy 2.c</u> The city shall minimize potential transportation noise through proper design of street circulation, coordination of routing, and other traffic control measures.

<u>Policy 2.d</u> The city shall actively support state and federal legislation that may be proposed to establish noise control standards to be met by automobile manufacturers.

Policy 2.e The city shall exercise its police powers by establishing an intensive motor vehicle

noise regulation program. This shall include, but not be limited to, pursuing ways to lower the rail bed and construct sound walls along the railroad right of way.

Policy 2.f The city shall seek measures to minimize noise impacts associated with railroad operations.

<u>Policy 2.g</u> The city shall explore measures in cooperation with the Federal Aviation Administration to minimize noise resulting from low flying aircraft (including ultralights) and helicopters, particularly along coastal areas.

<u>Policy 2.h</u> The City shall encourage the California Department of Transportation (Caltrans) to construct sound walls along the San Diego Freeway. Any modifications to the freeway that would increase the capacity of the freeway or increase speeds are considered by the City to have the potential of significantly noise impacting the residents of Solana Beach. Before any such modifications are made necessary mitigation measures such as noise barriers should be constructed.

Objective 3.0

Establish measures to control impacts from non-transportation noise sources.

<u>Policy 3.a</u> The city shall ensure the effective enforcement of city, state and federal noise level standards by all appropriate city divisions. The city shall provide quick response to complaints and rapid abatement of noise nuisances within the scope of the city's police powers.

<u>Policy 3.b</u> The city shall actively advocate federal regulations for the control of equipment noise levels. Currently, Federal regulations only control noise emissions from air compressors. Standards may be developed for additional equipment.

<u>Policy 3.c</u> The city shall establish noise guidelines for city purchasing policy to take advantage of federal regulations and labeling requirements.

<u>Policy 3.d</u> The city shall coordinate with the California Occupational Safety and Health Administration (Cal-OSHA) to provide information on and enforcement of occupational noise requirements within the city.

<u>Policy 3.e</u> The city shall cooperate with the Fair Board, the City of Del Mar and all adjacent entities (including the cities of Encinitas, San Diego and the County of San Diego) to reduce noise impacts from sources outside the city included, but not limited to, concerts.

<u>Policy 3.f.</u> The city shall adopt a noise ordinance designed to control non-transportation noise sources within the city. The noise ordinance will be designed to control industrial and commercial sources of noise as well as occasional noise sources such as barking dogs, gas powered dust blowers and excessively loud amplified music.

Objective 4.0

Integrate the adopted community noise ordinance and related considerations into the city's ongoing land use planning process.

<u>Policy 4.a</u> The city shall require that potential noise impacts be addressed for all projects as part of the initial study per CEQA to determine if unacceptable noise levels will be created or experienced. Depending on the level of impact, a noise impact evaluation may be required to be undertaken. Should noise abatement be necessary, the city shall require the implementation of mitigation measures based on a detailed technical study prepared by a qualified acoustical engineer.

Policy 4.b The city shall not approve projects that do not comply with the standards established in the community noise ordinance concerning noise/land use compatibility unless all practical measures have been taken to mitigate potential noise impacts and the City Council adopts a "Statement of Overriding Considerations" which provides the rationale for approving such a project.

<u>Policy 4.c</u> The city shall establish a noise monitoring program to identify progress in achieving noise abatement objectives and to perform necessary updating of the noise element and community noise ordinance.

4.0 THE PLAN FOR CONTROL AND MANAGEMENT OF NOISE

In order to achieve the goals and objectives of the Noise Element, an effective implementation program developed within the constraints of the City's financial and staffing capabilities is necessary. The underlying purpose is to reduce the number of people exposed to excessive noise and to minimize the future effect of noise in the City. The following are the actions that the City should consider implementing to control the impacts of noise in Solana Beach.

- Issue 1 Transportation Noise Control The most efficient and effective means of controlling noise from transportation systems is reducing noise at the source. However, since the City has little direct control over source noise levels because of State and Federal preemption (i.e. State Motor Vehicle Noise Standards), policies should be focused on reducing the impact of the noise on the community. Cooperative efforts with State and Federal offices are essential.
 - Action 1 Encourage the use of walls and berms in the design of residential or other noise sensitive land uses that are adjacent to major roads, commercial, or industrial areas.
 - Action 2 Pursue with Caltrans the issue of sound walls along Interstate 5.

- Action 3 Provide for continued evaluation of truck movements and routes in the City to provide effective separation from residential or other noise sensitive land uses.
- Action 4 Encourage the enforcement of State Motor Vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Solana Beach Police Department.
- Action 5 Encourage aircraft overflights to occur over the ocean at least 1 mile off the coast to minimize the impact on noise sensitive land uses within the City.
- Issue 2 Noise and Land Use Planning Integration. Community noise considerations are to be incorporated into land use planning. These measures are intended to prevent future noise and land-use incompatibilities.
 - Action 6 Establish standards that specify acceptable limits of noise for various land uses throughout the City. These criteria are designed to fully integrate noise considerations into land use planning to prevent new noise/land use conflicts. Exhibit 14 shows criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the bases for the development of specific Noise Standards. These standards, presented in Exhibit 15, define the City policies related to land uses and acceptable noise levels. These tables are the primary tools which allow the City to ensure noise integrated planning for compatibility between land uses and outdoor noise.
 - Action 7 Incorporate noise reduction features during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses. The noise referral zones identified in Exhibits 10 and 12 (areas exposed to noise levels greater than 55 CNEL) can be used to identify locations of potential conflict. New developments will be permitted only if appropriate mitigation measures are included such that the standards contained in this Element or an adopted ordinance are met.

Action 8 Enforce the State of California Uniform Building Code that specifies that the indoor noise levels for residential living spaces not exceed 45 dB LDN/CNEL due to the combined effect of all noise sources. The State requires implementation of this standard when the outdoor noise levels exceed 60 dB LDN/CNEL. The Noise Referral Zones (60 CNEL) can be used to determine when this standard needs to be addressed. The Uniform Building Code (specifically, the California Administrative Code, Title 24, Part 6, Division T25, Chapter 1, Subchapter 1, Article 4, Sections T25-28) requires that "Interior community noise levels (CNEL/LDN) with windows closed, attributable to exterior sources shall not exceed an annual CNEL or LDN of 45 dB in any habitable room." The code requires that this standard be applied to all new hotels, motels, apartment houses and dwellings other than detached single-family dwellings.

Issue 3 - Community Noise Control for Non-Transportation Noise Sources. The focus of control of noise from non-transportation sources is the Community Noise Ordinance. The ordinance can be used to protect people from noise generated on adjacent properties.

Action 9 Amend and adopt a new comprehensive community noise ordinance to ensure that City residents are not exposed to excessive noise levels from existing and new stationary noise sources. The purpose of the ordinance is to protect people from non-transportation related noise sources such as music, machinery and pumps, air conditioners and truck traffic on private property. The Noise Ordinance does not apply to motor vehicle noise on public streets, but it does apply to vehicles on private property. The Noise Ordinance is designed to protect quiet residential areas from stationary noise sources. The noise levels encouraged by the ordinance are typical of a quiet residential area.

Action 10 Enforce the new community Noise Ordinance. The most effective method to control community noise impacts from non-transportation noise sources is through application of the community noise ordinance.

- Action 11 Monitor upcoming court decisions regarding noise control of operation on State property by the City.
- Action 12 Require that new commercial projects, proposed for development near existing residential land use, demonstrate compliance with the City Noise Ordinance prior to approval of the project.
- Action 13 All new residential projects to be constructed near existing sources of non-transportation noise (including but not limited to commercial facilities, public parks with sports activities) must demonstrate via an acoustical study conducted by a Registered Engineer that the indoor noise levels will be consistent with the limits contained in the noise ordinance.
- Action 14 Require construction activity to comply with limits established in the City Noise Ordinance.
- Action 15 Designate one agency in the City to act as the noise control coordinator.

 This will ensure the continued operation of noise enforcement efforts of the City.

5.0 GLOSSARY

A-WEIGHTED SOUND LEVEL. The sound pressure level in decibels as measured on a sound level meter using the A-Weighted filter network. The A-Weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgement of loudness.

AMBIENT NOISE LEVEL. The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). The average equivalent A-Weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of ten (10) decibels to sound levels in the night before 7 a.m. and after 10 p.m.

DAY-NIGHT AVERAGE LEVEL (LDN). The average equivalent A-Weighted sound level during a 24-hour day, obtained after addition of ten (10) decibels to sound levels in the night before 7 a.m. and after 10 p.m.

DECIBEL (dB). A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A). A-weighted sound level (see definition above)

EQUIVALENT SOUND LEVEL (LEQ). The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

FREQUENCY. The number of times per second that a sound pressure signal oscillates about the prevailing atmosphere pressure. The unit of frequency is the hertz. The abbreviation is Hz.

INTRUSIVE NOISE. That noise which intrudes over and above the ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or informational content as well as the prevailing ambient noise level.

L10. The A-Weighted sound level exceeded 10 percent of the sample time. Similarly L50, L90, L99, etc.

NOISE. Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound..."

NOISE ATTENUATION. The ability of a material, substance, or medium to reduce the noise level from one place to another or between one room and another. Noise attenuation is specified in decibels.

NOISE EXPOSURE CONTOURS. Lines drawn around a noise source indicating constant or equal level of noise exposure. CNEL and LDN are typical metrics used.

NOISE REFERRAL ZONES. Such zones are defined as the area within the contour defining a CNEL level of 55 decibels. It is the level at which either State or Federal laws and standards related to land use become important and, in some cases, preempted local laws and regulations. Any proposed noise sensitive development which may be impacted by a total noise environment of 55 dB CNEL or more should be evaluated on a project specific basis.

NOISE SENSITIVE LAND USE. Those specific land uses which have associated indoor and/or outdoor human activities that may be subject to stress and/or significant interference from noise produced by community sound sources. Such human activity typically occurs daily for continuous periods of 24 hours or is of such a nature that noise is significantly disruptive to activities that occur for short periods. Specifically, noise sensitive land uses include: residences of all types, hospitals, places of worship and schools.

SOUND LEVEL (NOISE LEVEL). The weighted sound pressure level obtained by use of a

sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

SOUND LEVEL METER. An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Appendix A

Noise Measurement Results

The following pages present the noise data collected during the measurement survey. The data reported is in terms of the Leq, Lmax, and various percentile descriptors. The Leq or noise equivalent level represents the energy average noise level. It is the building block of the CNEL scale, and the Leq noise level measured at a site during the daytime is usually about equal to the CNEL noise level. The CNEL noise level is a 24 hour weighted average noise level as previously discussed. The CNEL noise level is not measured directly because it would require that the monitoring be conducted continuously at each site for a minimum of 24 hours.

The Lmax noise level is simply the loudest noise level that was obtained during the monitoring period. The L1, L5, L10, etc. are percentile noise levels. The L5, for example, represents the noise level that is exceeded 5% of the time. It represents the louder noise levels experienced at the site. For example, at a site along Highway 101, the L5 level may be determined primarily by truck pass-bys. The L50 noise level is the level that is exceed half of the time. The L90 and L99 noise levels represent the quieter periods at the measurement site. Sometimes these levels are referred to as the ambient or background noise levels. Usually, these levels are determined by distant roadways or freeways.

The noise measurement results should be considered as a "snapshot" of the noise environment. The noise levels will of course change throughout the day and may change from day to day. However, our past experience when repeating measurements on several different days indicates that the noise levels do not vary greatly from one day to another. Exceptions to this observation include sites near industrial areas, airports, and construction sites.

Site 1 is indicative of the residential areas west of Highway 101. The noise level is relatively low due primarily to local traffic and some construction activities during the day. Although Highway 101 could be heard at the site, the noise from the highway appears to be reduced due to the intervening buildings which as a noise barrier. The site was also measured during the evening hours to check for potential noise generated by nearby restaurants and other commercial operations.

Sites 2, 3, and 19 attempted to determine the extent of the noise impact generated by the commercial core east of Highway 101. The measurements at Site 2 indicate that the lumber yard generates significant levels of noise. Violations by the lumber yard of the Noise Ordinance may occur from time to time. All three sites can be significantly impacted by train noise.

Sites 4, 5, 6, 7, and 8 were measurements in residential areas that border low traffic volume roadways. The main concern with these sites was how much noise was really generated by these low volume roadways, and how intrusive was the noise from the distant major roadways. In our site selection meeting many of the residents felt that this was a noisy part of the City. A second purpose of the measurements was to document the noise levels when the fairgrounds were not in operation. Generally, our measurements indicated that these were fairly quite areas. Measurement results at Sites 4, 5 and 8 at first glance appeared higher than expected. However, the microphone location at Sites 4 and 5 was located closer to the street than usual and thus recorded higher levels. A portion of the Site 8 data included lawn mower noise.

Sites 9, 10, and 14 were located along major arterial roadways. The noise data indicate that the noise levels are high along these roadways.

Site 18 was selected as a very quite site near the wetlands area. It was selected to document how quite the wetlands currently are. The noise levels measured at this site were the quietest encountered during our survey.

Sites 11 and 17 were designed to measure freeway noise intrusion into the adjacent residential area. Houses exist between the freeway and the measurement sites. Site 11 data indicate that the substantial noise reduction is provided by the first row of homes along the freeway in protecting the second row. Less reduction was observed at Site 17.

Sites 12, 13, 15, and 16 are representative of various residential location east of the freeway. In general, these areas are considered to be relatively quiet. The noise levels at Sites 12 and 13 were higher than is typical for this type of area. Further review of the data indicated unusual heavy truck activity which appeared to be due to construction activities. Heavy truck noise at Site 12 was made even worse at this location due to the roadway grade. Site 15 and 16 had low noise levels typical for this type of area.

Exhibit A (Part 1) Noise Measurement Results

SITE: # 1

LOCATION: Cliff Street at Acacia Avenue

DATE: September 10, 1987 TIME: 12:45 p.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
54.8 72.4 66.4 60.6 57.2 50.6 48.6 45.0 43.2

PRIMARY NOISE SOURCES:

Traffic, Construction

LAND USE:

Commercial/Residential Border

COMMENTS:

Slight traffic noise from Pacific Coast Highway

SITE: # 1

LOCATION: Cliff Street at Acacia Avenue

DATE: September 10, 1987 TIME: 7:45 p.m.

 MEASURED VALUES (dBA)

 LEO
 Lmax
 L1
 L5
 L10
 L33
 L50
 L90
 L99

 49.1
 64.7
 60.5
 52.9
 50.5
 47.5
 46.1
 41.3
 38.1

PRIMARY NOISE SOURCES:

Traffic, Construction

LAND USE:

Commercial/Residential Border

COMMENTS:

Slight traffic noise from Pacific Coast Highway

SITE: # 2

LOCATION: 202 Cedros Avenue across from Lumber Yard

DATE: September 10, 1987

TIME: 3:00 p.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
64.7 82.7 76.7 69.9 67.3 59.7 57.1 51.1 48.7

PRIMARY NOISE SOURCES:

Lumber Yard, Traffic

LAND USE:

ResidentialCommercial Border

COMMENTS:

Trucks and Machinery in Lumber Yard are noise source

SITE: #3

LOCATION: 209 Rios Avenue

DATE: September 10, 1987 TIME: 3:45 p.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
53.3 73.9 66.9 57.3 50.9 46.5 45.3 43.1 42.1

PRIMARY NOISE SOURCES:

Traffic

LAND USE:

Residential

Very light Traffic

Exhibit A (Part 2) Noise Measurement Results

SITE: # 4

LOCATION: 354 Nardo Avenue

DATE: September 10, 1987

TIME: 4:15 p.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
61.0 79.9 74.1 67.9 62.3 48.3 44.7 40.1 38.7

PRIMARY NOISE SOURCES:

Traffic

LAND USE:

Residential

COMMENTS: Very light Traffic

SITE: #5

LOCATION: Nardo Avenue at Solana Circle

DATE: September 10, 1987 TIME: 4:30 p.m.

 MEASURED VALUES (dBA)

 LEO
 Lmax
 L1
 L5
 L10
 L33
 L50
 L90
 L99

 62.5
 80.3
 74.1
 69.1
 65.9
 56.3
 50.5
 41.3
 38.9

PRIMARY NOISE SOURCES:

Traffic

LAND USE:

Residential

COMMENTS:

Speed limit is 30 MPH

SITE: # 6

LOCATION: Solana Circle

DATE: September 11, 1987 TIME: 8:45 a.m.

 MEASURED VALUES (dBA)

 LEO
 Lmax
 L1
 L5
 L10
 L33
 L50
 L90
 L99

 54.8
 67.0
 63.6
 58.6
 57.2
 54.4
 52.6
 49.8
 48.4

PRIMARY NOISE SOURCES:

Traffic, Light Construction

LAND USE: Residential

COMMENTS:

Very light Traffic

LOCATION: Del Mar Dowms at Pepper Tree Lane

DATE: September 11, 1987 TIME: 9:15 a.m.

MEASURED VALUES (dBA)

LEO Lmax L1 L5 L10 L33 L50 L90 L99

48.1 61.0 58.8 52.2 50.4 47.2 45.6 42.8 41.8

PRIMARY NOISE SOURCES: Very Light Traffic, Wind Chimes, Single Engine Planes

LAND USE:

Residential, Church

COMMENTS:

There is currently no Race Track noise

Exhibit A (Part 3) Noise Measurement Results

LOCATION: Highland Court on top of Cliff

DATE: September 11, 1987

TIME: 9:45 a.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
62.4 70.8 67.2 65.0 64.2 62.8 62.0 58.8 55.4

PRIMARY NOISE SOURCES:

Traffic, Lawn Mowers

LAND USE:

Residential below

COMMENTS:

There is no Race Track noise

LOCATION: Stevens Avenue in front of City Hall

DATE: September 11, 1987

TIME: 10:00 a.m.

MEASURED VALUES (dBA)

LEO Lmax L1 L5 L10 L33 L50 L90 L99 65.6 79.0 74.6 71.2 69.6 64.8 62.0 52.6 47.2

PRIMARY NOISE SOURCES:

Traffic

LAND USE:

Commercial

COMMENTS:

SITE: # 10

LOCATION: 505 Lomas Santa Fe Drive

DATE: September 11, 1987 TIME: 10:45 a.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
72.3 88.4 82.8 76.6 75.0 71.4 69.0 60.6 50.0

PRIMARY NOISE SOURCES:

Traffic

LAND USE:

School, Commercial

COMMENTS:

Diesel Air Horn is cause of Lmax

Traffic Count: 96.2% Cars, 1.1% Medium Truck, 2.6% Heavy Truck

LOCATION: Santa Florencia at Santa Olivia

DATE: September 11, 1987

TIME: 11:30 a.m.

 MEASURED VALUES (dBA)

 LEO
 Lmax
 L1
 L5
 L10
 L33
 L50
 L90
 L99

 61.4
 76.4
 74.0
 67.6
 64.0
 57.0
 55.8
 53.4
 52.2

PRIMARY NOISE SOURCES:

Traffic, Interstate 5 Freeway

LAND USE:

Residential

Truck with backup beeper is cause of Lmax

Exhibit A (Part 4) Noise Measurement Results SITE: # 12 LOCATION: Santa Helena at Santa Victoria DATE: September 11, 1987 TIME: 11:45 a.m.

MEASURED VALUES (ARA)

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
72.2 97.4 79.8 71.6 68.8 60.2 56.4 50.8 49.0

PRIMARY NOISE SOURCES: Traffic

LAND USE:
Residential

COMMENTS:

Heavy Truck going up grade is cause of Lmax

SITE: # 13 LOCATION: San Mario Court at Santa Marta Court

DATE: September 11, 1987 TIME: 1:00 p.m.

 MEASURED VALUES (dBA)

 LEO
 Lmax
 L1
 L5
 L10
 L33
 L50
 L90
 L99

 65.1
 81.0
 76.0
 72.6
 69.6
 59.8
 53.2
 43.0
 41.4

PRIMARY NOISE SOURCES: Traffic

LAND USE: Residential, Golf Course

COMMENTS: Heavy Truck is cause of Lmax

SITE: # 14 LOCATION: Lomas Santa Fe Drive at Caminode Villas

DATE: September 11, 1987 TIME: 1:45 p.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
70.7 84.4 79.0 76.6 75.2 69.8 65.8 52.2 50.2

PRIMARY NOISE SOURCES: Traffic

LAND USE: Residential, Golf Course

COMMENTS:

SITE: #15
LOCATION: Via De La Senda at Vista De La Tierra

DATE: September 11, 1987 TIME: 2:15 p.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
48.5 63.0 58.0 52.8 49.6 46.6 46.0 44.2 43.2

PRIMARY NOISE SOURCES: Traffic, Bird Calls

LAND USE:
Residential, Golf Course

COMMENTS:

Only two cars drove by location

Exhibit A (Part 5) Noise Measurement Results SITE: # 16 LOCATION: Avocado Place DATE: September 11, 1987 TIME: 2:45 p.m. MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
54.5 70.6 65.8 57.0 54.0 52.2 51.8 50.2 49.4 PRIMARY NOISE SOURCES: Interstate 5 Freeway LAND USE: Residential COMMENTS: LOCATION: Marine View Avenue DATE: September 11, 1987 TIME: 3:00 p.m. MEASURED VALUES (dBA) LEO Lmax L1 L5 L10 L33 L50 L90 L99 66.1 79.6 70.0 67.8 67.2 66.2 65.6 64.0 62.8 PRIMARY NOISE SOURCES: Interstate 5 Freeway LAND USE: Residential COMMENTS: SITE: # 18 LOCATION: (The Back Road) DATE: September 11, 1987 TIME: 3:15 p.m.
 MEASURED VALUES (dBA)

 LEO
 Lmax
 L1
 L5
 L10
 L33
 L50
 L90
 L94

 47.1
 53.8
 52.0
 50.4
 49.4
 47.2
 46.2
 43.8
 42.4
 PRIMARY NOISE SOURCES: Traffic, Interstate 5 Freeway LAND USE: Residential COMMENTS: Only four cars drove by location SITE: # 19 LOCATION: 508 Cedros Avenue DATE: September 11, 1987 TIME: 3:45 p.m. MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L9
58.1 77.3 70.3 59.1 57.3 54.9 53.7 50.7 46.5 PRIMARY NOISE SOURCES: Traffic from Pacific Coast Highway, Train LAND USE: Commercial/Residential Border

One Amtrak Train with six cars at seventy MPH passed location

COMMENTS:

Exhibit A (Part 6) Noise Measurement Results

LOCATION: Pacific Coast Highway at Dahlia Drive

DATE: September 10, 1987 TIME: 8:15 p.m.

MEASURED VALUES (dBA)
LEO Lmax L1 L5 L10 L33 L50 L90 L99
66.8 82.1 77.9 72.5 70.7 64.7 61.9 52.9 49.1

PRIMARY NOISE SOURCES:

Traffic, Train

LAND USE:

Commercial

COMMENTS:

One Amtrak Train with seven cars at seventy MPH passed location Traffic Count: 98.7% Cars, 0.5% Medium Truck, 0.8% Heavy Truck

SITE: # 20 LOCATION: Pacific Coast Highway at Dahlia Drive

DATE: September 11, 1987 TIME: 6:15 p.m.

 MEASURED VALUES (dBA)

 LEO
 Lmax
 L1
 L5
 L10
 L33
 L50
 L90
 L99

 68.5
 80.1
 76.3
 73.5
 72.3
 68.5
 66.3
 58.1
 53.1

PRIMARY NOISE SOURCES:

Traffic

LAND USE:

Commercial

COMMENTS:

Traffic Count: 98.3% Cars, 1.1% Medium Truck, 0.6% Heavy Truck



Safety Element



City of Solana Beach General Plan Program

Phillips Brandt Reddick



SOLANA BEACH GENERAL PLAN SAFETY ELEMENT

CITY OF SOLANA BEACH

380 Stevens Avenue, Suite 120 Solana Beach, California 92075 (619) 755-2998

Solana Beach City Council

Margaret Schlesinger, Mayor
Jack Moore, Deputy Mayor
Marion Dodson, Council Member
Richard Hendlin, Council Member
Celine Olson, Council Member

Adopted November 14, 1988

TABLE OF CONTENTS

		Page	No.
1.0	INTRODUCTION	1	
	1.1 Overview	1	
	1.2 Purpose	1	
	1.3 Authorization	2	
2.0	EXISTING CONDITIONS/ISSUE ANALYSIS	3	
	2.1 Geologic and Seismic Hazards	3	
	2.2 Blufftop/Slope Stability	10	
	2.3 Flood Hazards	11	
	2.4 Fire Hazards	15	
	2.5 Hazardous Materials	18	
	2.6 Aircraft Hazards	23	
	2.7 Other Public Safety Issues	23	
3.0	GOALS, OBJECTIVES AND POLICIES OF THE SAFETY ELEMENT	28	
4.0	THE SAFETY PLAN	33	
5.0	GLOSSARY	34	

SAFETY ELEMENT

1.0 INTRODUCTION

1.1 OVERVIEW

1.1.1 Contents of Element

This safety element identifies existing conditions and issues involving potential hazards and public safety considerations affecting land development in Solana Beach. This element also sets forth goals, objectives, and policies to provide for public health, safety, and welfare.

1.1.2 Key Issues

The key issues affecting the health and safety of Solana Beach's residents and visitors are hazards associated with seismicity, coastal bluff erosion and stability problems, flooding in the Stevens Avenue area south of Nardo Avenue, potential septic system problems, and potential fire hazards. These and other public safety issues are described in Section 2.0 of this element.

1.1.3 Overview of Goals, Objectives, and Policies

The goals of this element are to minimize potential hazards and to provide a safe and secure environment for the public. To achieve these goals, a comprehensive set of objectives and policies is established. These objectives and policies involve specific measures and programs to ensure that potential risks are minimized or avoided during the development process. Further, these objectives and policies provide the framework for ensuring the city's ability to respond adequately to emergencies.

1.2 PURPOSE

This safety element is intended to document potential hazards that must be considered in planning the location, type, and density of development. By

identifying the nature and location of potential hazards, the city of Solana Beach has been able to adopt a land use plan that reflects such hazards and has been able to establish appropriate programs to prevent or minimize death, injuries, damage to property, and economic and social dislocation resulting from public safety hazards.

1.3 AUTHORIZATION

Government Code Section 65302(g) requires the adoption of a safety element to protect the public from unreasonable risks associated with seismic hazards, geologic hazards, flooding, fire, and other public safety hazards.

2.0 EXISTING CONDITIONS/ISSUE ANALYSIS

2.1 GEOLOGIC AND SEISMIC HAZARDS

2.1.1 Seismic Setting

Solana Beach is located on the western edge of the Peninsular Range geologic province. The Peninsular Range province is a physiographic feature which includes the Laguna Mountains, the Agua Tibia Mountains, the Santa Rosa Mountains, the San Jacinto Mountains, and the Santa Ana Mountains. The formation of this province's mountain ranges and other features is due to the relative movement of the Pacific and North American continental plates along the San Andreas fault system. The province is located immediately west of the San Andreas fault and is affected by a number of other faults.

Solana Beach, like much of southern California, is located in a region of high seismic activity. Table 1 summarizes the key features of faults located in the San Diego region that could affect Solana Beach.

Table 1
REGIONAL SEISMICITY

Fault Name	Fault Length (miles)	Estimated Magnitude of Maximum Credible Earthquake
San Andreas	650	8.4
Elsinore	135	7.6
San Jacinto	125	7.8
San Clemente	110	7.7

Source: County of San Diego, <u>Seismic Safety Element - San Diego County General Plan</u>, January 1975.

In addition to the faults listed on Table 1, an offshore extension of the Rose Canyon fault lies approximately two miles to the west of Solana Beach. This fault is considered to be potentially active, meaning that evidence exists for movement within this zone during the Pleistocene age (two million to 11,000+ years ago) but not during the Holocene age (last 11,000+ years). Events are much less likely to occur on potentially active faults as compared to active faults. However, given the close

proximity of the Rose Canyon fault to Solana Beach, a strong earthquake on this fault could produce severe ground shaking in the city. In addition, recent offshore seismic activity has demonstrated that small magnitude earthquakes (less than 4.5 magnitude) can be generated on offshore faults, located approximately five miles offshore, and known as the South Coast Offshore Zone of Deformation.1

Historically, earthquakes less than magnitude 4 have been common to the San Diego region. However, the probability of a magnitude 6 or greater earthquake being generated locally in the San Diego area is considered low based on present knowledge.2

2.1.2 Geologic and Seismic Constraints to Development

The suitability of land for development is influenced strongly by the presence of certain geologic and seismic hazards. These hazards range from the direct and indirect effects associated with earthquakes to problems associated with slope stability and soil conditions that are not conducive to development. The general nature of various geologic and seismic constraints to development and their applicability to Solana Beach are described below.

SEISMIC SHAKING

The energy released by movement along a fault travels through the earth's crust as shock waves which cause the ground motion associated with earthquakes. The severity of ground motion at any given location is related to the total amount of energy released, the distance from the earthquake's origin, and the character of surface and subsurface geologic conditions.

A commonly used method of measuring the severity of ground motion involves estimating maximum ground acceleration. Acceleration is defined as the

¹ Geocon Incorporated, Geotechnical Investigation for Solana Beach Lifeguard Facility, Solana Beach, California, January 1988.

Geocon Incorporated, Soil and Geologic Reconnaissance for Solana Beach Community Center Expansion, Solana Beach, California, December 1987.

increased velocity given to the ground by shock waves passing through the geologic structure. Acceleration is typically described in terms of gravitational force where one unit of gravitational force (designated as "1g") is equal to 9.8 meters/sec².

The degree of ground acceleration is a function of underlying geologic materials. As shock waves pass through loose, unconsolidated geologic materials, the amplitude of the waves is greater than that associated with dense, consolidated materials (eg., hillside areas). Thus, the higher amplitude of shock waves results in greater ground acceleration in areas underlain by alluvial soils or water-saturated sediments.

Virtually all of Solana Beach consists of well consolidated geologic materials rather than poorly consolidated soils such as alluvial deposits. Nevertheless, it should be noted that ground shaking in hillside areas could induce the slumping of geologic structures or landslides in areas of slope instability.

One method of measuring the effects of seismic shaking at specific locations is through use of the Modified Mercalli Scale. As shown on Table 2, this scale represents the classification of an earthquake's effects according to twelve categories ranging from "not felt" to "damage nearly total." This is a subjective scale in that an earthquake's intensity is measured in relation to its effect on human life. According to the California Division of Mines and Geology, Solana Beach is within an area where the intensity of maximum expectable earthquakes would likely be moderate. Thus, the probable maximum intensity of an earthquake in the San Diego area would ranks as a VII or VIII on the Modified Mercali Scale. 1

SURFACE RUPTURE

The sudden horizontal or vertical displacement along an earthquake fault, which releases the energy associated with earthquakes, may occur far enough below the earth's surface where such displacement is not visible.

¹ California Division of Mines and Geology, <u>Urban Geology Master Plan</u> for California - Bulletin 198, 1973.

Table 2

MODIFIED MERCALLI INTENSITY SCALE

A subjective measure of the force of an earthquake at a particular place as determined by its effects on persons, structures, and earth materials. The principal scale used in the United States today is the Modified Mercalli, 1956 verson as defined below (modified from Richter, 1958).

- I. Not felt.
- II. Felt by persons at rest, on upper floors, or favorably placed.
- III. Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
- IV. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing automobiles rock. Windows, dishes, doors rattle. Wooden walls and frame may creak.
- V. Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing. Shutters, pictures move. Pendulum clocks stop, start, change rate.
- VI. Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D1 cracked.
- VII. Difficult to stand. Noticed by drivers of automobiles. Hanging objects quiver. Furniture broken. Weak chimneys broken at roof line. Damage to masonry D, including cracks; fall of plaster, loose bricks, stones, tiles, and unbraced parapets. Small slides and carving in along sand or gravel banks. Large bells ring.

- VIII.Steering of automobiles affected.

 Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
- IX. General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground and liquefaction.
 - X. Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
- XI. Rails bent greatly. Underground pipelines completely out of service.
- XII. Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown in the air.

Source: Seismic Hazards and Land Use Planning, USGS Circular 690, by D.R. Nichols and J.M. Buchanan-Banks, 1974.

¹ See Uniform Building Code for specifications on quality of masonry construction.

However, fault movement often extends to the earth's surface where ground rupture or displacement occurs along the fault plane. The extent of surface rupture is dependent upon the fault's length and the magnitude of the earthquake.

Concern about the growing number of structures located on or near active and potentially active faults led the state of California to enact the Alquist-Priolo Geologic Hazards Zone Act of 1972, revised in 1975 and renamed the Alquist-Priolo Special Studies Zone Act. This act requires that geologic studies must be undertaken prior to the approval of structures for human occupancy located within "special study zones." Said studies are to determine the precise location and necessary setbacks from identified faults.

"Special studies zones" are strips one-eighth of a mile or more wide along each side of faults recognized as active or potentially active by the State Geologist, within which the danger of fault rupture is presumed to exist until otherwise demonstrated by direct investigation. Active faults are those with known movement during the past 11,000 years. Potentially active faults are those with known movement during the past two-to-three million years.

In addition to mandating geologic studies for public structures proposed for areas within "special studies zones," the Alquist-Priolo Act prohibits the development of such structures within fifty feet of an active fault which has displaced the ground surface. The State Geologist has not designated any "special studies zones" in or near Solana Beach.1

LIQUEFACTION

Liquefaction is the substantial loss of strength of poorly consolidated and saturated soils due to the effects of seismic shaking. The passage of seismic waves through such soils can cause soil particles to be suspended temporarily in water, creating conditions very similar to quicksand. The resultant loss of strength can cause significant damage to structures as they settle, tilt, or collapse.

California Division of Mines and Geology, Fault-Rupture Hazard Zones in California-Special Publication 42, Revised March 1980.

The potential for liquefaction in a given area is dependent upon soil characteristics, groundwater conditions, and the intensity of seismic shaking. In the Solana Beach area, the potential for liquefaction is greatest in the area located generally between Stevens Avenue and Valley Avenue, and in the area north of Via de la Valle between Del Mar Downs and Stevens Avenue. These are the only areas in the city which are underlain by poorly consolidated alluvium and slope wash which could liquefy during an earthquake depending upon groundwater conditions.

SEICHES

Seiches are the oscillation of water in bodies of water sometimes caused by earthquakes. A common example is the "sloshing" of water in a swimming pool during an earthquake. Seiches are potentially hazardous when the wave action created in lakes or bays is strong enough to threaten human beings and structures nearby the body of water. The only area near Solana Beach where this is a potential concern is San Elijo Lagoon. However, this is a very minor concern since urban development in the city is not in close enough proximity to the lagoon to be exposed to seiches.

LANDSLIDES

Landslides are the downslope movement of geologic materials. Typically, such movement occurs as block glide (in which slope failure occurs along a planar surface and the mass of materials slides as a single block) or as a slump (in which slope failure occurs along single or multiple surfaces and the mass of materials slides in a rotational motion).

In addition to landslides, other slope stability problems found in hill-side areas must be considered in planning future land uses. These problems include soil creep, earthflows, and mudflows. Soil creep is the slow downslope movement of individual soil particles at varying rates. This type of movement does not involve sudden slippage such as that associated with landslides, but instead involves the gradual movement of soil particles which eventually changes the surface of affected hillsides.

Earthflows involve the downslope movement of soils that have been saturated and form a viscous flow of material. The material typically slumps down the hillside in a relatively slow flow.

Mudflows involve the rapid downslope flow of mud and debris. Mudflows are potentially more destructive than earthflows since they can form in a relatively short period of time, flow at a greater velocity, and are often more far-reaching in terms in affected area.

The stability of slopes is related to a variety of factors, including the slope's steepness; the strength of geologic materials in terms of resistance to the downslope stress of gravity; the characteristics of bedding planes, joints, and faults; surface water and groundwater conditions; changes in loading (eg., building construction); changes in vegetation (eg., wildfire, grading, and overgrazing); exposure to weathering; and susceptibility to disturbances such as seismic shaking.

In Solana Beach, the principal area of concern regarding slope stability is along the city's coastal bluffs. This issue is discussed further in Section 2.2 of this element.

SHRINK-SWELL POTENTIAL

Certain soils which include clay materials tend to swell when their moisture content increases and shrink when moisture decreases. As moisture content varies, the resultant shrinking and swelling of these soils (known as expansive soils) can cause fairly extensive damage to structures built over such material. For example, floor slabs may be heaved or cracked, walls and ceilings may be cracked, and doors and windows may stick due to the structural movement caused by expansive soils. Shrink and swell is not considered to be a problem in Solana Beach.

SUBSIDENCE

Subsidence typically involves the gradual settlement and compaction of subsurface materials resulting from fluid withdrawl (eg., oil, natural gas, and groundwater extraction). As fluid withdrawl proceeds, subterranean

hydraulic pressure decreases. Consequently, unconsolidated geologic materials are compacted under the burden of overlying geologic materials and urban development. The resulting subsidence of the ground surface may occur gradually over a wide area. Since it generally covers a fairly wide area, subsidence tends to affect continuous structures such as roads and utility lines. Further, subsidence can create drainage problems and lower ground levels near drainage courses, thereby exposing more area to potential flood hazards. There are no areas in or near Solana Beach where these types of subsidence hazards have been identified.

2.2 BLUFFTOP/SLOPE STABILITY

Slope stability is a significant concern along Solana Beach's entire coastal bluff area. These steep bluffs have experienced losses resulting from the combined effect of natural and man-made activities. Given the very steep, almost vertical orientation of the bluff, they receive the full force of waves. The wave action constantly weakens the base of the bluffs, particularly when high tides are combined with high waves originating from Pacific Ocean storms. Such storms commonly cause breakers of about 15 feet.

Urban development on the blufftops has placed increased loads upon the geologic structure of the area. Further, saturation of bluff sands and increased groundwater flow resulting from urban run-off (ie., excessive irrigation of urban landscaping) contributes to the weakening of the bluffs.

The combination of natural and man-made factors has resulted in blufftop erosion. This erosion is typically experienced as sudden slippage rather than as gradual movement. Although measures such as the placement of riprap or seawalls are commonly used to absorb the brunt of wave action, their effectiveness is limited. Further, such measures often involve high repair and maintenance requirements and result in bluff erosion at higher levels due to wave overtopping.1 Sea walls have been shown to increase

¹ Kim Fulton-Bennet and Gary B. Griggs, <u>Coastal Protection Structures</u> and <u>Their Effectiveness</u> (a joint publication of the California Department of Boating and Waterways and the U.C. Santa Cruz Marine Sciences Institute), undated.

the scouring action of waves, removing the sand. This makes the beach steeper and wave action against the bluffs more intense with time. This process results in a loss of public beach.

All coastal blufftop areas are of concern to the city; areas of key concern in Solana Beach are blufftop problems in the vicinity of Pacific and Circle Drives and in the vicinity of Del Mar Shores Terrace. Structures in both of these areas are in danger of loss due to further erosion.

A comprehensive approach to minimizing hazards associated with blufftop erosion would involve the installation of appropriate protection structures, the implementation of measures to reduce and, where appropriate, redirect groundwater flow (eg., installation of subdrains to collect and redirect groundwater), and land use controls such as restrictive setback requirements to minimize potentially catastrophic damage to new buildings.

2.3 FLOOD HAZARDS

2.3.1 Historic Problems

Flooding problems in Solana Beach have historically involved coastal flooding and San Dieguito River flooding in the area of Stevens Avenue and Valley Avenue. With respect to coastal flooding, the occurence of storm events in combination with high astronomical tides and strong winds can cause a significant wave runup and allow storm waves to attack higher than normal elevations along the coastline. When this occurs, shoreline erosion and coastal flooding frequently result in damage to inadequately protected structures and facilities located along low-lying portions of the shoreline.

Examples of these conditions are storms which occurred on September 24, 1939; December 26, 1940; and September 9-10, 1976. These storms were all of a nature which affected the coast of the city of Solana Beach in an adverse manner.

The December 26, 1940 problem was caused by an offshore storm which combined with high tides. The other two storms were also tropical in nature and caused damage by wave action.

Another period of severe weather during the winter of 1977-1978 drew attention to the fact that storms coupled with intensified rainfall and large waves may cause more erosion along the coastline in a shorter period of time than erosion during years of normal weathering.

An additional major cause of flooding in the city of Solana Beach is long-duration, high-intensity storms in the San Dieguito Watershed. Large floods occurred in the San Dieguito drainage area in 1939, 1940, 1977, 1978, 1980, and 1982.1

In the Stevens Avenue/Valley Avenue area, Solana Beach's drainage facilities are sized adequately to handle flood flows. However, capacity problems with downstream flood control facilities south of Via de la Valle (outside of Solana Beach) has sometimes caused floodwaters to back up into the Stevens Avenue/Valley Avenue area.

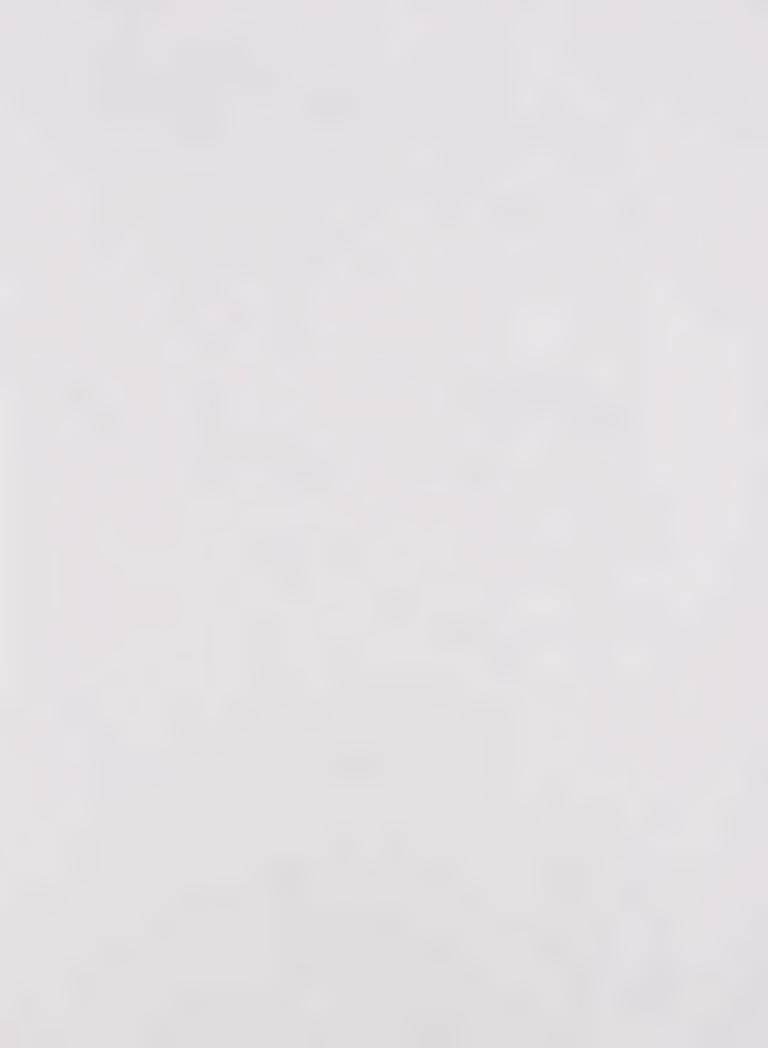
2.3.2 Existing Flood Hazard Areas and Zone Designation

Flood hazard areas in the Solana Beach area have been mapped through the National Flood Insurance Program administered by the U.S. Department of Housing and Urban Development (HUD) and the Federal Emergency Management Agency (FEMA). The Flood Insurance Rate Map (FIRM) prepared for the Solana Beach area delineates areas exposed to potential 100-year and 500-year flooding, including coastal flood hazard areas. Exhibit 1 illustrates the location of Solana Beach's flood hazard areas.

A 100-year flood, also known as an intermediate regional flood, is defined as flooding that can be expected once every one hundred years or which has a one percent probability of occurring in any given year. A 500-year flood, also known as a standard project flood, is defined as flooding that would occur if the maximum storm of record in southern California was centered over the previously saturated watershed of a given drainage course. Most flood control projects are designed for flooding of this magnitude (hence the name, "standard project flood") since it is regarded as a reasonably foreseeable "worst-case" scenario. The recurrence interval for standard project flooding is generally estimated to be once every 200 to 300 years.

Federal Emergency Management Agency, <u>Draft Flood Insurance Study-City</u> of Solana Beach, California, July 22, 1978.





2.3.3 Land Use and Hydrology Issues

The relationship between land use and flood hazards has two key aspects. First, the potential for flooding is a major constraint to land development in that the hazards posed by flooding severely restricts the types of land uses within the floodplain. Second, urban land use development could result in adverse effects on downstream areas by increasing the potential for flooding. These key considerations are discussed below.

FLOODPLAIN ZONING/LAND USE COMPATIBILITY

Floodplains are relatively flat land areas subject to periodic inundation by nearby drainage courses. These areas have historically attracted human settlement by virtue of their flat terrain, proximity to water, and soil characteristics that are often very fertile. It is important to recognize that periodic flooding is a natural process that creates the conditions on the floodplain which attracts development in the first place. Flooding represents a hazard only after human settlement on the floodplain exposes people and property to risks associated with the inevitable flood flows.

Of course, water control measures such as the construction of dams, levees, retention basins, channel improvements, etc. are available to reduce the extent of flooding. However, even the most modern engineering practices cannot be substituted completely for implementing appropriate land use restrictions within floodplains.

Areas potentially subject to inundation by 100-year floods should generally be limited to land uses that do not interfere with the capacity of the drainage course and that minimize hazards posed to people and property. Thus, agricultural and recreation/open space land uses are considered the most appropriate land uses for the 100-year flood zone. Further, the development of any such use should not involve, or at least minimize, the development of structures that would be exposed to 100-year floodwaters. The only areas in Solana Beach where development has occurred within a 100-year flood zone is in the Stevens Avenue/Valley Avenue area. No new urban development should be permitted within any 100-year flood zone unless it can be demonstrated that building pads will be loca-

ted above the 100-year flood level and/or floodproofing measures are incorporated into project design.

Areas within the 500-year floodplain are generally subject to a lesser degree of risk as compared to the 100-year floodplain. Therefore, urban land uses may be permitted with the understanding that some degree of risk is assumed for potential damage resulting from infrequent and typically shallow flooding. The only area in Solana Beach where development has occurred within a 500-year flood zone is also in the Stevens Avenue/Valley Avenue area.

EFFECTS OF URBANIZATION

Urban development can result in adverse effects upon downstream areas involving increased flooding and/or erosion and sedimentation problems. Since urbanization involves the construction of streets, sidewalks, parking lots, and buildings, the amount of impermeable land area within the watershed is increased. Thus, the increase in impermeable surfaces associated with buildout of the Solana Beach General Plan is expected to reduce the land area capable of absorbing precipitation. Consequently, stormwater runoff conveyed to the San Dieguito River and the San Elijo Lagoon will increase in both volume of flow and flow velocity.

Further, urban development typically involves the development of storm drain systems designed to convey stormwater from urban development directly to streams and river. While the effect of individual projects themselves may be relatively minor, the cumulative effect of increased impermeable surfaces and storm drain construction throughout upstream portions of Solana Beach could result in greater frequency and magnitude of flooding in downstream areas. However, given the extent of existing urbanization in Solana Beach, additional effects upon downstream areas are expected to be very minor.

Urbanization also can result in increased erosion and sediment transport effects. As vegetation is removed during site preparation and grading activities, soil is exposed and is much more susceptible to wind and water erosion. Further, the increased velocity of runoff resulting from the con-

struction of impermeable surfaces can increase the erosive power of storm flows. Thus, downstream areas such as San Elijo Lagoon may experience increased sediment deposition which can affect water quality and related biological resources adversely.

2.4 FIRE HAZARDS

2.4.1 Types and Causes of Fires

Fire hazards in Solana Beach take two basic forms: structural fires and brush fires. Structural fires in urban areas typically pose an immediate hazard to the affected structure's occupants and any nearby structures. Such fires are usually caused by arson, carelessness, or by malfunctioning equipment and are usually brought under control relatively quickly by Solana Beach's Fire Department.

Brush fires (also known as wildland fires) can spread quickly across a wide portion of undeveloped area, particularly hillside areas. Although some wildland fires have a natural origin (ie., lightning), the vast majority are caused by human beings either through arson or through carelessness. Given the far-reaching and potentially devastating consequences of wildland fires, it is important to recognize high fire hazard areas and to integrate related considerations into the land use planning and development process. The following subsections describe areas of high fire hazard in the Solana Beach area and discuss ways to minimize such hazards through appropriate planning and development measures.

2.4.2 Existing Fire Hazard Areas

With respect to structural fires, the Solana Beach Fire Department designates "target hazard" locations based on characteristics involving the type of use, population density, and/or structural condition. For example, schools are considered target hazard locations given the type of use and number of people typically using school structures. The high density residential development along Sierra Avenue south of Plaza Street is a target hazard area primarily because of population density considerations.

As shown on Exhibit 2, several hillside areas within the city are classified as brush fire hazard areas. These classifications reflect an area's characteristics related to fuel loading (ie., the density and type of vegetation) and topography. Brush fires tend to spread more rapidly on steeper slopes and firefighting is more difficult on steeper slopes since the mobility of firefighters and equipment is much more limited.

The city's primary brush fire hazard areas include hillsides along the northern edge of the city above San Elijo Lagoon, the area between San Andres Drive and Solana Drive, and the area generally between Nardo Avenue and Stevens Avenue.

2.4.3 Fire Hazard/Land Use Considerations

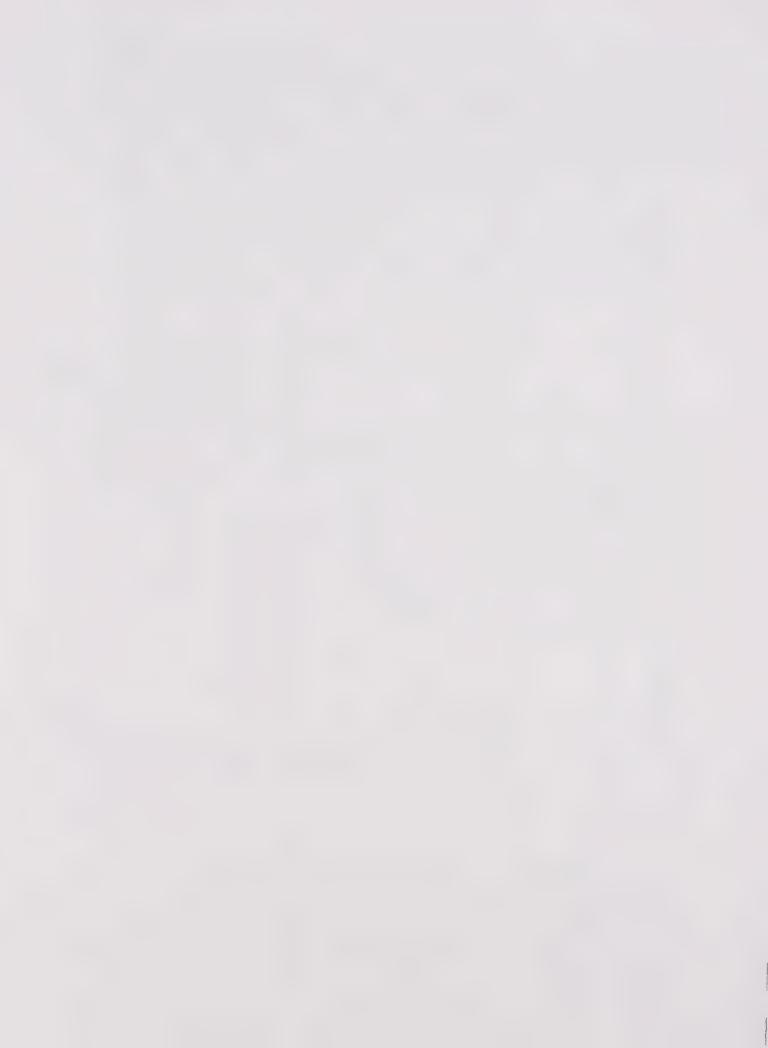
Although most brush fires are caused by human beings, it is important to recognize that fires are part of the natural cycle. They are occasionally necessary to eliminate dead vegetation and to help regenerate the ecosystem. They are considered hazardous primarily because of the dangers they pose to human beings and developed properties. The need to minimize the exposure of people and property to fire hazards requires a twofold approach. One aspect involves the use of appropriate land use planning and development regulations. The second aspect involves fire prevention, management, and control measures. Each aspect of this twofold approach is described below.

PLANNING AND DEVELOPMENT REGULATIONS

Land development within or adjacent to areas of high fire hazard will increase the number of people exposed to risk and will increase the value of property that could be destroyed. Further, by altering vegetation and increasing human activity in such areas, land development can increase the degree of potential hazard.

Perhaps the most appropriate land uses within high hazard areas would be open space preserves or light recreational facilities. However, urbanization has already occurred throughout the city, including neighborhoods adjacent to hillside areas susceptible to brush fires. Further, practical





considerations involving the development rights of private landowners, the need for a balanced mix of land uses in Solana Beach, and the public cost of maintaining open space/recreational areas limit the extent to which high hazard areas can be restricted from development. Nevertheless, the general plan provides for open space in the Holmwood Canyon area partly as a measure to limit the potential for additional urban development in this area of high brush fire potential.

Since a complete prohibition of development in all high hazard areas is not practical, it is necessary to ensure that future land uses are developed in accordance with strict regulations concerning land use types, densities, and site design.

In general, site plans for any new development-proposed in high hazard areas are subject to the review of the Solana Beach FIre Department during the city's site plan review process. Such plans must satisfy the city that the site provides adequate emergency access, has adequate water supply and pressure to meet fireflow needs, and provides an adequate fuelbreak or buffer zone to prevent the spread of structural fires to hillside areas. Further, strict enforcement of building codes will minimize potential fire hazards resulting from inappropriate building materials or structural design.

PREVENTION AND CONTROL

The imposition of strict zoning and development regulations such as those referenced above represents a key method of fire prevention. Other fire prevention and control measures include the removal or reduction of vegetation that constitutes fuel for fires in or near developed areas, controlled burning (particularly in areas of dense, dead vegetation), and the development of a network of firebreaks that reduce the potential spread of wildfires.

Maintaining adequate emergency response capabilities is also necessary to ensure that fires are controlled if and when they occur. One method to ensure adequate emergency response capabilities is to provide the Solana Beach Fire Department with sufficient financial resources to maintain its

facilities, equipment, and personnel at levels appropriate to the needs identified by the city's Fire Chief. A second method involves maintaining city and county emergency roads to high fire hazard areas to keep them unobstructed and in adequate condition so that emergency vehicles will continue to have access to these areas.

2.5 HAZARDOUS MATERIALS

2.5.1 Introduction

A hazardous material is defined as any injurious substance, including pesticides, herbicides, toxic metals and chemicals, explosives, volatile chemicals, and nuclear fuels and materials. The use of hazardous materials is widespread today in industrial and agricultural activities. As a result of revelations during recent years regarding the adverse health effects of hazardous materials (eg., Love Canal in upstate New York and the Stringfellow Acid Pits in southern California), public concern about this issue has grown significantly. This increased attention has led to a variety of federal, state and local regulations controlling the transport, use, storage, and disposal of hazardous materials.

Hazardous materials can be classified into four general categories: toxins, irritants, flammables, and explosives. Toxins include a wide range of industrial chemicals and agricultural pesticides which are capable of producing serious illness or death due to poisoning. Irritants can cause inflammation or destruction of living tissue with effects ranging from mild to severe, based on the degree of exposure and the type of material involved. Flammables are dangerous because of their low ignition temperatures and rapid burning characteristics. Some flammables burn so violently that they cannot be extinguished, and must be allowed to burn out naturally. Explosives can produce rapid chemical reactions causing damage due to blast and flash fire. Because of their widespread use, it can be assumed that each type of hazardous material is either transported through, used, or stored to some degree within the Solana Beach area.

The following subsections describe the known status of existing hazardous materials conditions in Solana Beach and describe strategies to safeguard the public from risks involving hazardous materials incidents.

2.5.2 Existing Hazards

Potential public health and safety effects associated with hazardous materials generally involve dangers present at a given site and risks associated with transporting hazardous materials. Potential dangers at a given site may involve the production, storage, use, and/or disposal of hazardous materials.

Pursuant to Assembly Bill (AB) 3750, the state Office of Planning and Research (OPR) has compiled a list of hazardous materials sites throughout California. Based upon input from the State Department of Health Services, the State Water Resources Control Board, and the California Waste Management Board, the list is intended to inform local agencies of hazardous waste and substance sites identified by the state as being within the local agencies' jurisdictions.

AB 3750 requires each applicant for a development project to consult the list, available at the local agency, and to submit a signed statement indicating whether or not the proposed project is located on a listed site. This statement must be submitted prior to the local agency's determination that the project's applications are complete.

As of December 1987, there are no sites within or in close proximity to Solana Beach included on OPR's list. This status is subject to change as new information becomes available in conjunction with OPR's semi-annual update of the list. Hazardous materials are likely to be found at some light manufacturing uses (eg., solvents and toxic metals) and at some commercial uses (eg., underground storage tanks at automobile service stations).

In terms of hazardous materials transportation, the key area of concern is Interstate 5 since it bisects the city and carries a high volume of traffic. As the principal route between San Diego and Los Angeles, hazardous materials are likely transported through Solana Beach every day. Data specifically regarding the transportation of hazardous materials through the city are not readily available. However, a review of California's recent experience involving hazardous materials is useful to understanding the nature and degree of potential risks due to hazardous materials transportation in the Solana Beach area.

Based upon the Congressional Office of Technology Assessment's findings regarding the amount of hazardous materials transported nationally, an estimated four to five million truckloads of hazardous materials are transported annually throughout California. The California Highway Patrol (CHP) has estimated that approximately 15 percent of trucks in rural areas and 25 percent of trucks in urban areas carry hazardous materials. Although the likelihood of accidents involving truck traffic transporting hazardous materials is not greater than that for general truck traffic, the consequences of incidents and accidents involving hazardous materials are much greater.

Of the 342 incidents on California's state highways involving hazardous materials reported by Caltrans in fiscal year 1984-85, 103 (or 30 percent) were accidents. The CHP reported 166 hazardous materials incidents on state highways and unincorporated county roads in 1985, of which 76 (46 percent) were accidents.⁴

Caltrans reported a total of 137,388 accidents on state highways in 1985. Thus, the 103 accidents involving hazardous materials transporters represented approximately 0.07 percent of the accidents which occurred on state highways. It is important to note that of these 103 accidents, 86 (83.5 percent) were attributed to driver error (ie., error on the part of the driver of the transporter or on the part of the driver of another vehicle). In general, human error has been determined as the cause of approximately 90 percent of total truck accidents statewide. 6

California Department of Transportation (in cooperation with the California Highway Patrol and the California Public Utilities Commission), Transportation of Hazardous Materials in California by Highway and Rail, a report to the Legislature as required by Chapter 1465, Statutes of 1985 (AB 1311-Leonard), August 1986, p. 2.

² Ibid., p. 4.

^{3 &}quot;Incidents" include deliberate dumping, accidental spills or leaks, and traffic accidents resulting in the release of hazardous materials. "Accidents" are unintentional events that may or may not result in the release of hazardous materials.

⁴ Ibid., p. 9. The difference in Caltrans and CHP statistics result from differing definitions, agency responsibilities, reporting requirements, and data collection systems.

⁵ Ibid., p. 10.

⁶ Ibid., p. 5.

Hazardous materials incidents (not involving vehicular accidents) on California's highways have also been attributed primarily to human error. Such errors typically include driver error in accepting improper shipments, mistakes when loading and unloading shipments, and failing to secure loads and/or closures properly.

2.5.3 Hazardous Materials Management

Regulations and enforcement of safety measures for the storage and use of hazardous materials is the responsibility of numerous agencies, including local fire agencies. National, state, and local fire codes act as a guideline for local enforcement.

The city Fire Department is currently working with the county of San Diego's Hazardous Materials unit to compile a list of businesses that either produce, use, or store hazardous materials. In addition, the city is considering the inclusion of an additional Fire Department staff member to manage the city's hazardous materials data base and to work with the community to ensure compliance with appropriate codes and regulations governing hazardous materials.

The U.S. Environmental Protection Agency (EPA) ensures that containers of hazardous materials are properly labeled with instructions for use. The California Department of Industrial Relations, Cal-OSHA Division, regulates the proper use of hazardous materials. The U.S. Department of Agriculture and California Department of Food and Agriculture and the Department of Industrial Regulations regulate pest control operations, pesticide dealers, and pesticide users to ensure that hazardous agricultural chemicals are properly used.

To minimize risks associated with hazardous materials transportation, the U.S. Department of Transportation (DOT) and the CHP have instituted a number of programs to minimize the number of truck-involved accidents and The Transportation Safety Act (also known as the Hazardous Materials Transportation Act) authorized the DOT to regulate the safe shipment of hazardous materials. As established in Title 49 of the Code of Federal Regulations, Sections 100-199, the DOT is authorized to:

- 1. Establish and revise criteria for handling hazardous materials:
- 2. Require hazardous materials carriers, shippers, and package-container manufacturers to submit biannual registration statements;

3. Grant exemptions to issued regulations;

- 4. Inspect records and properties relative to packaging, containing, and transporting of hazardous materials;
- 5. Provide both civil and criminal penalties for violations of the HMTA or its regulations;
- 6. Establish facilities and staff to evaluate risks and set up a central reporting and data system to facilitate hazardous materials emergency response; and
- 7. Conduct a continuing review of all aspects of the transportation of hazardous materials to recommend steps to ensure safety and to prepare an annual report to Congress. $^{\rm l}$

The CHP's efforts to minimize hazardous materials incidents and accidents are an integral part of its on-going commercial vehicle enforcement program. This program includes the following measures:²

- . Formal inspections of hazardous materials transporters
- . Rules-of-the-road enforcement
- . On-highway and off-highway commercial vehicle inspections
- . Weight enforcement
- . Major incident response teams
- . Concerted education and enforcement efforts directed toward drivers on specified commercial corridors
- Production of truck safety maps in conjunction with the California Trucking Association and other trucking industry liaison activities
- Participation in the Department of Health Services' Hazardous Waste Strike Force

¹ Transportation Research Board, National Academy of Sciences, op. cit., p. $10.\,$

² Detailed descriptions of these measures are provided in the book entitled Commercial Vehicle Activities, prepared by the Department of the California Highway Patrol, June 1986.

The CHP believes that the implementation and improvement of on-going commercial vehicle programs effectively reduces the risk of truck-involved accidents.

2.6 AIRCRAFT HAZARDS

The Naval Air Station (NAS) Miramar is the closest air facility to Solana Beach. It is a military air installation located approximately 8-2/3 miles to the southeast of the city. It does not pose any extraordinary hazard to Solana Beach given its distance from the city. Therefore, no special planning measures are necessary to manage potential aircraft (both fixed and rotary wing) hazards in Solana Beach, although the city should work with the FAA to reduce overflights, including those for advertising purposes.

2.7 OTHER PUBLIC SAFETY ISSUES

2.7.1 Law Enforcement

The city of Solana Beach contracts with the San Diego County Sheriff's Department for law enforcement services. The Sheriff's Department provides the city with a full range of services which includes uniformed patrol, detective follow-up, traffic enforcement, accident investigation, aviation support, and administrative and supervisory functions.

The Sheriff's Department serves the city from its Encinitas Substation. The department currently uses a guidelines for minimum service of one 24-hour patrol unit for every 13,275 residents (not including traffic enforcement).

Response time to priority calls to areas within the city is approximately 8.4 minutes (mean average) or 7.0 minutes (median average). Non-priority call response time is approximately 14.3 minutes (mean) or 8.0 minutes (median).

The Sheriff's Department typically responds to growth by assigning additional deputies to an area in direct proportion to its increase in popula-

tion. Accordingly, the need for augmented law enforcement services resulting from increased population in Solana Beach can be met by increasing the number of deputies available to the city commensurate with the city's ability to pay. Further, the need for increased law enforcement services can be minimized to some degree by improving the city's traffic circulation systems and by requiring new developments to incorporate "defensible space" measures in project design. Such measures typically include adequate lighting of exterior areas and the use of burglary-resistant hardware and fixtures in buildings.

2.7.2 Public Health

Scripps Memorial Hospital in Encinitas currently provides emergency services to Solana Beach and neighboring communities. The hospital offers the following types of emergency services:

- . Total medical services for emergency care, 24 hours daily.
- Emergency backup by Scripps staff physicians as requested for outpatients.
- . Transfer of emergency cases where appropriate.
- . Treatment of patients who have no attending physician, referral to private physicians from emergency department referral list.
- . Evaluation of employees for job-related injuries/diseases.
- Participation in promoting a community base plan for external disasters.

Examples of emergency care available include:

- . Suturing and repair of lacerations
- . Treatment of all orthopedic injuries
- . Emergency cardiac care
- Emergency childbirth
- . Pediatric treatment
- . Emergency treatment of all medical diagnoses

At present, the hospital does not function as a maternity center. Deliveries are done on an emergency basis. Transport to maternity centers is done on all elective deliveries. Maternity services are offered at Scripps Memorial Hospital in La Jolla.

Advanced cardiovascular surgery is conducted when needed at Scripps-La Jolla with transport from the Scripps-Encinitas emergency department to La Jolla by critical care helicopter ambulance transport.

The hospital currently provides 93 beds (as of 1988) and experienced an occupancy rate of about 76.5 percent in 1987. In response to the extraordinary growth experienced in the North San Diego County area, the hospital is constructing a new wing. This wing will have 150 patient beds, 50 of which will be devoted to rehabilitation services. The old wing will be used for auxilliary services and office space. Included in the plans is an expanded 10-bed emergency department. Also, a heliport may be constructed.

A key public health issue in Solana Beach involves leakage problems experienced with residential septic systems. The age and poor condition of septic tanks in these areas have resulted in leaking systems which saturate soils and eventually affect downstream areas adversely with raw sewage.

The City Council of Solana Beach recently issued a policy statement on the use of new septic systems as well as expanding existing septic systems.

2.7.3 Marine Safety

The Solana Beach Department of Marine Safety provides beach and aquatic emergency services along the beach within the city. The lifeguard head-quarters at 111 South Sierra Avenue is staffed with three full-time personnel and houses the department's fleet of four 4-wheel-drive vehicles, and equipment used for cliff rescues, underwater search and rescue activities, and small boat rescues. The facility also serves as a weather station for the National Weather Service.

A staff of 45 lifeguards is used on a seasonal basis for operations conducted at three lifeguard stations (with a fourth station added during the summer). These stations are sited at principal beach access points.

2.7.4 Disaster Preparedness

Disaster preparedness typically involves the development of response procedures, identification of evacuation routes, design and installation of warning systems, purchase of emergency equipment, and training of emergency personnel. It is through such proactive measures that the effectiveness of other emergency management procedures is ensured.

These other emergency management procedures include response, recovery, and mitigation programs. Response mechanisms come into play when a hazard event occurs and may include warnings, evacuations, rescue operations, fire fighting, emergency medical care, emergency food and shelter provisions, and measures to preserve public health and safety such as riot control.

Following the hazard event, recovery activities may involve repairing damaged roads, buildings, pipelines, and re-establishing the community's physical, social, and economic systems.

Mitigation programs are akin to preparedness actions in that they are measures to reduce or eliminate the adverse effects of future hazard events. Mitigation programs are those that go beyond the typical objectives of preparedness, response, and recovery. The principal forms of mitigation are as follows:

- Implementation of land use controls to prevent or limit the location of development and populations in areas that are susceptible to hazard events;
- Enforcement of building codes established to minimize the likelihood or extent of damage, which may necessitate the design or construction of a building; and
- . Installation of structural barriers (eg., dams and levees) to shield people and development from harm.

The city of Solana Beach's Fire Chief is responsible for overseeing the city's disaster preparedness program. Solana Beach's program for local emergency management is currently being prepared by the Fire Department and is expected to designate appropriate evacuation routes and emergency shelters. The program is also expected to establish appropriate management procedures to be followed by emergency personnel.

Larger emergency response actions are managed on a regional basis by the county of San Diego, on a statewide basis by the State Office of Emergency Services, and on a federal basis by the Federal Emergency Management Agency (FEMA). Solana Beach's Fire Chief is responsible for coordinating the city's emergency response actions with these agencies.

3.0 GOALS, OBJECTIVES, AND POLICIES

GOAL 3.1

TO MINIMIZE HAZARDS TO PUBLIC HEALTH, SAFETY, AND WELFARE RESULTING FROM NATURAL AND MAN-MADE PHENOMENA

Objective 1.0

Ensure that geologic hazards in all areas for human use or habitation are mitigated properly or avoided prior to or during development.

<u>Policy 1.a</u> The city shall require geotechnical investigations by a certified engineering geologist for all grading and construction proposed within any area of significant erosion, slope instability, and/or areas subject to severe seismic hazards, including inland and coastal bluffs.

<u>Policy 1.b</u> The city shall provide qualified expertise for the review of geotechnical reports and sufficient personnel for the field inspection of grading operations and construction.

<u>Policy 1.c</u> The city shall require construction to be in conformance with the Uniform Building Code, specifically Chapter 23 as it provides for earthquake-resistant design, Chapter 70 as it provides for excavation and grading, and with the city's adopted hillside development ordinance.

Policy 1.d The city shall encourage public information programs to encourage increased awareness of seismic and geologic hazards.

<u>Policy 1.e</u> The city shall encourage programs to abate or modify structures deemed hazardous to human habitation.

Objective 2.0

Establish siting and development standards to reduce risk and damage from flood hazards.

- Policy 2.a The city shall cooperate with the Federal Emergency Management Agency in defining flood hazard areas within the city.
- <u>Policy 2.b</u> The city shall enter into the U.S. Department of Housing and Urban Development's Flood Insurance Program.
- <u>Policy 2.c</u> The city shall enact an ordinance which specifies the types of land uses to be permitted within 100-year flood hazard areas and which requires all structures proposed within 100-year flood zones to be elevated at least one foot above the 100-year flood level.

<u>Policy 2.d</u> The city shall require the submittal of information prepared by a qualified civil or hydrological engineer which certifies compliance with development standards established for 100-year flood zones.

Objective 3.0

Minimize the adverse effects of urbanization upon drainage and flood control facilities.

- <u>Policy 3.a</u> The city shall require the implementation of adequate erosion control measures for development projects to minimize sedimentation damage to drainage facilities.
- <u>Policy 3.b</u> The city shall maintain its open space preserves and shall require developers to provide adequate open space pursuant to the standards established in the Conservation and Open Space Element of the General Plan and the city's zoning ordinance as a measure to minimize impermeable surfaces throughout the city.
- <u>Policy 3.c</u> The city shall cooperate with the San Diego County Flood Control District to ensure that citywide development does not lead to significant adverse effects upon the county's flood control facilities.

Objective 4.0

Establish fire prevention regulations and standards to minimize potential fire hazards and fire losses.

<u>Policy 4.a</u> The city shall enact an ordinance which establishes criteria for land development in hillside areas with emphasis on fire-retardant construction materials, access for fire-fighting personnel and equipment, removal of combustible vegetation, and minimizing the overall exposure to risks associated with wildfires and adjacent structure fires.

<u>Policy 4.b</u> The city shall enact an ordinance which establishes structural design standards to ensure adequate fire safety.

<u>Policy 4.c</u> The city shall ensure that development is phased properly in relation to the city's ability to provide an adequate level of fire protection.

<u>Policy 4.d</u> The city shall establish appropriate measures to mitigate potential fire hazards in areas of special concern.

<u>Policy 4.e</u> The city Fire Department shall review proposed site plans to ensure that adequate fire safety measures are provided.

<u>Policy 4.f</u> The city will participate with other communities in mutual aid agreements to ensure effective cooperation among fire agencies.

Objective 5.0

Establish a program to ensure the safe handling, disposal, and cleanup of hazardous materials in conjunction with federal, state, and regional programs and regulations.

<u>Policy 5.a</u> The city shall enact an ordinance which sets forth restrictions and safeguards concerning the use, storage, and disposal of specific hazardous materials.

<u>Policy 5.b</u> The city Fire Department shall establish and periodically update an inventory of hazardous materials produced, stored, or otherwise located within the city for purposes of coordinating emergency response.

GOAL 3.2

TO PROVIDE A SAFE AND SECURE ENVIRONMENT FOR THE CITY'S RESIDENTS, WORK-ERS, AND VISITORS

Objective 1.0

Provide an adequate level of police protection throughout the city.

<u>Policy 1.a</u> The city shall provide a minimum of one 24-hour police patrol per 13,275 residents.

<u>Policy 1.b</u> The city shall enact an ordinance which specifies site design standards for ensuring adequate emergency access.

<u>Policy 1.c</u> The city shall require new developments and improvements to employ defensible space concepts into site design and building specifications (eg., appropriate setbacks, adequate lighting of walkways and parking lots, and the use of burglary-resistant hardware and fixtures in buildings).

<u>Policy 1.d</u> The city shall encourage the use of state-of-the-art design concepts and technological improvements for the prevention of crime.

Objective 2.0

Enhance public awareness and participation in crime prevention.

<u>Policy 2.a</u> The city shall encourage the San Diego County Sheriff's Department to establish a Neighborhood Watch program and shall provide ongoing support to participating neighborhoods.

Objective 3.0

Establish an emergency preparedness program and maintain the program through regular practice drills and periodic updating of the program.

<u>Policy 3.a</u> The city shall establish an Emergency Response Team composed of key city staff.

<u>Policy 3.b</u> The city's Emergency Response Team shall develop a detailed emergency response manual which describes the appropriate actions and responsibilities of personnel designated for participation in emergency response activities. This manual shall become a working document and shall be made available to the public and city staff. Further, this document shall be updated at a minimum of every five years.

<u>Policy 3.c</u> The emergency response manual shall include a map indicating clearly the city's designated evacuation routes and an operating plan for evacuation management to ensure safe and orderly evacuation.

<u>Policy 3.d</u> The city's Emergency Response Team shall be responsible for directing the city's personnel and volunteers involved in disaster relief and emergency evacuation efforts. The team also shall be responsible for coordinating the city's emergency response with federal, state, and other local agencies.

<u>Policy 3.e</u> The Emergency Response Team shall direct annual practice drills involving key city personnel, volunteers, and other entities responsible for conducting emergency response activities.

Objective 4.0

Protect public safety in potentially hazardous areas such as blufftops.

<u>Policy 4.a</u> The city shall limit public access to hazardous blufftop locations through appropriate barrier installation, signage, etc.

Policy 4.b The city shall discourage the use of seawalls.

4.0 THE SAFETY PLAN

As discussed in Section 2.0 of this safety element, a variety of safety issues such as blufftop hazards have a substantial effect upon urban development. To ensure that these issues receive appropriate consideration, the primary responsibility for implementation of the policies established in this safety element is with the city Planning Department and the city's Fire Chief. The city Planning Department is responsible for evaluating proposed development projects to identify potential hazards associated with the development. The Planning Department's site plan review process therefore takes into consideration possible seismic, geologic, flood, and fire hazards. Proposed projects which have potential adverse effects related to safety considerations should have measures to mitigate such effects pursuant to the California Environmental Quality Act (CEQA). The Planning Department is charged with ensuring compliance with CEQA in processing development proposals. Nevertheless, the Solana Beach City Council bears ultimate responsibility for certifying compliance with CEQA and for imposing specific mitigation measures as conditions of project approval.

The Fire Department is responsible for reviewing development proposals to identify potential hazards related to fire. The department also is responsible for the appropriate management of emergency response facilities personnel and equipment as allocated by the Solana Beach City Council.

Disaster preparedness and response activities, including planning, training of personnel, and implementation of response mechanisms (eg., evacuation) shall be managed by the Fire Chief. The Fire Chief is also responsible for interagency coordination. The Solana Beach City Council is responsible for appropriating adequate resources to meet emergency response requirements.

With respect to hazardous materials, the Fire Department, with support from the city Planning Department, is responsible for establishing an inventory of hazardous materials produced, stored, or used in Solana Beach. The Planning Department is responsible for consolidating the city's inventory with semi-annual listings distributed by the State Office of Planning and Research and for requiring project applicants to consult said list pursuant to the requirements of AB 3750.

5.0 GLOSSARY

Coastal Bluff: Any bluff where the toe of slope is now or within the past 200 years has been subject to marine erosion.

Critical Facility: Includes facilities housing or serving many people or otherwise posing unusual hazards in case of damage from or malfunction during an earthquake, such as hospitals, fire, police, and emergency service facilities, utility "lifeline" facilities, such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

Fault: A fracture in the earth's crus forming a boundary between rock masses that have shifted.

Active Fault: A fault that has moved recently and which is likely to move again. For planning purposes, "active fault" is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

Potentially Active Fault: 1) A fault that last moved within the Quaternary Period before the Holocene Epoch (the last 2,000,000 to 11,000 years); 2) a fault which, because it is judged to be capable of ground rupture or shaking, poses an unacceptable risk for a proposed structure.

Inactive Fault: A fault which shows no evidence of movement in recent geologic time and no potential for movement in the relatively near future.

Ground Failure: Mudslide, landslide, liquefaction, or the seismic compaction of soils.

Hazardous Material: An injurious substance, including pesticides, herbicides, toxic metals and chemicals, liquified natural gas, explosives, volatile chemicals, and nuclear fuels.

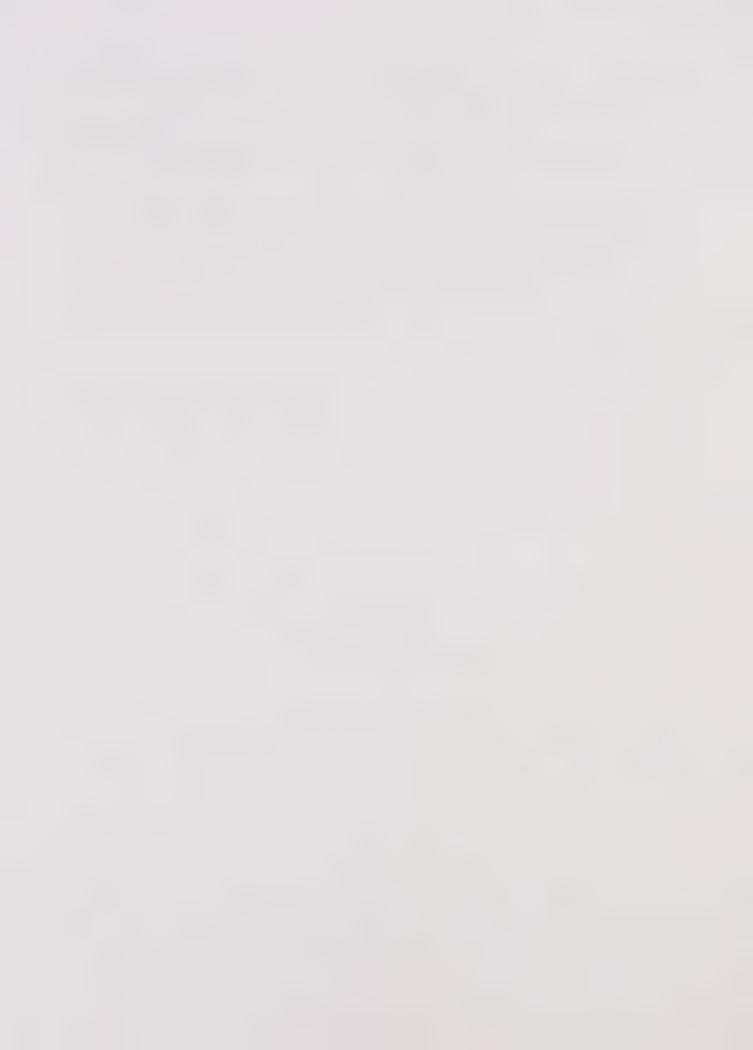
Liquefaction: A process by which water-saturated granular soils transform from a solid to a liquid state because of a sudden shock or strain.

Seiche: An earthquake-induced wave in a lake, reservoir, or harbor.

Subsidence: The gradual, local settling or sinking of the earth's surface with little or no horizontal motion. (Subsidence is usually the result of gas, oil, or water extraction, hydrocompaction, or peat oxidation, and not the result of a landslide or slope failure.)

Surface Rupture: A break in the ground's surface and associated deformation resulting from the movement of a fault.

Wildland Fires: Fires occurring in a nonurban, natural area which contains uncultivated lands, timber, range, watershed, brush, or grasslands.



Open Space & Conservation Element



City of Solana Beach General Plan Program

Phillips Brandt Reddick



SOLANA BEACH GENERAL PLAN OPEN SPACE AND CONSERVATION ELEMENT

CITY OF SOLANA BEACH

380 Stevens Avenue, Suite 120 Solana Beach, California 92075 (619) 755-2998

Solana Beach City Council

Margaret Schlesinger, Mayor
Jack Moore, Deputy Mayor
Marion Dodson, Council Member
Richard Hendlin, Council Member
Celine Olson, Council Member

Adopted November 14, 1988

TABLE OF CONTENTS

		Page No.
1.0	INTRODUCTION	1
	1.1 Overview	1
	1.2 Purpose	2
	1.3 Authorization	2
2.0	EXISTING CONDITIONS/ISSUE ANALYSIS	4
	2.1 Water Resources	4
	2.2 Floriculture Resources	5
	2.3 Air Resources	6
	2.4 Biological Resources	12
	2.5 Cultural/Scientific Resources	14
	2.6 Energy Resources	16
	2.7 Open Space and Visual Resources	18
3.0	GOALS, OBJECTIVES AND POLICIES OF THE CONSERVATION	
	AND OPEN SPACE ELEMENT	22
4.0	THE CONSERVATION AND OPEN SPACE PLAN	30
5.0	GLOSSARY	31

CONSERVATION AND OPEN SPACE ELEMENT

1.0 INTRODUCTION

1.1 OVERVIEW

1.1.1 Contents of Element

The Government Code requirements concerning topics to be addressed in conservation elements overlaps many of the Government Code requirements for topics to be addressed in open space elements. For example, considerations regarding open space for the preservation of natural resources and open space used for the managed production of resources encompass the concerns of the conservation element. Therefore, this Conservation and Open Space Element of the Solana Beach General Plan is a combined element which describes existing conditions and issues related to water resources, floricultural resources, air resources, cultural resources, energy resources, and open space/visual resources. This element also contains goals, objectives, and policies established to ensure that natural resources within Solana Beach are managed wisely.

1.1.2 Key Issues

Conservation and open space issues in Solana Beach are many and diverse. The key issues involve the potential effects of general plan buildout upon natural resources such as biological systems and air resources, as well as cultural/scientific resources. Further, the scenic quality of Solana Beach's open spaces and visual features is important, particularly in residential and park areas, and needs to be protected from potentially adverse effects of future development.

1.1.3 Overview of Goals, Objectives, and Policies

The overall goals set forth in this element are to protect and conserve the city's natural and cultural resources, and to protect sensitive open space areas and viewsheds. The objectives and policies articulate the city's role and responsibilities involving the management of natural and cultural resources, including open space.

1.2 PURPOSE

This element is mandated by state law to promote the protection, maintenance, and use of natural resources. These resources may include those that are economically productive or have intrinsic ecological/historical/archaeological value. A key purpose of this element is to guide city decisionmaking to prevent the wasteful exploitation, destruction, and neglect of natural resources.

Another key purpose of this element is to inventory existing open space land within the city and to establish a program for preserving and managing open space areas appropriately.

1.3 AUTHORIZATION

As stated below, a conservation element is required pursuant to Government Code Section 65302(d):

A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared. The conservation element may also cover:

(1) The reclamation of land and waters.

(2) Prevention and control of the pollution of streams and other waters.

(3) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.

(4) Prevention, control, and correction of the ero-

sion of soils, beaches, and shores.

(5) Protection of watersheds.

(6) The location, quantity and quality of the rock, sand and gravel resources.

(7) Flood control.

Government Code Sections 65302(e) and 65560 through 65567 set forth the requirements for and the intent of an open space element. As stated in Section 65560(b):

"Open space land" is any parcel or area of land or water which is essentially unimproved and devoted to an open space use as defined in this section, and which is designated on a local, regional or state open space

plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks or rivers and streams, and watershed lands.

(2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corri-

dors.

(4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.

This combined conservation and open space element fulfills the statutory requirements related to those issues that are applicable to Solana Beacn.

2.0 EXISTING CONDITIONS/ISSUE ANALYSIS

2.1 WATER RESOURCES

2.1.1 Watershed and Hydrology

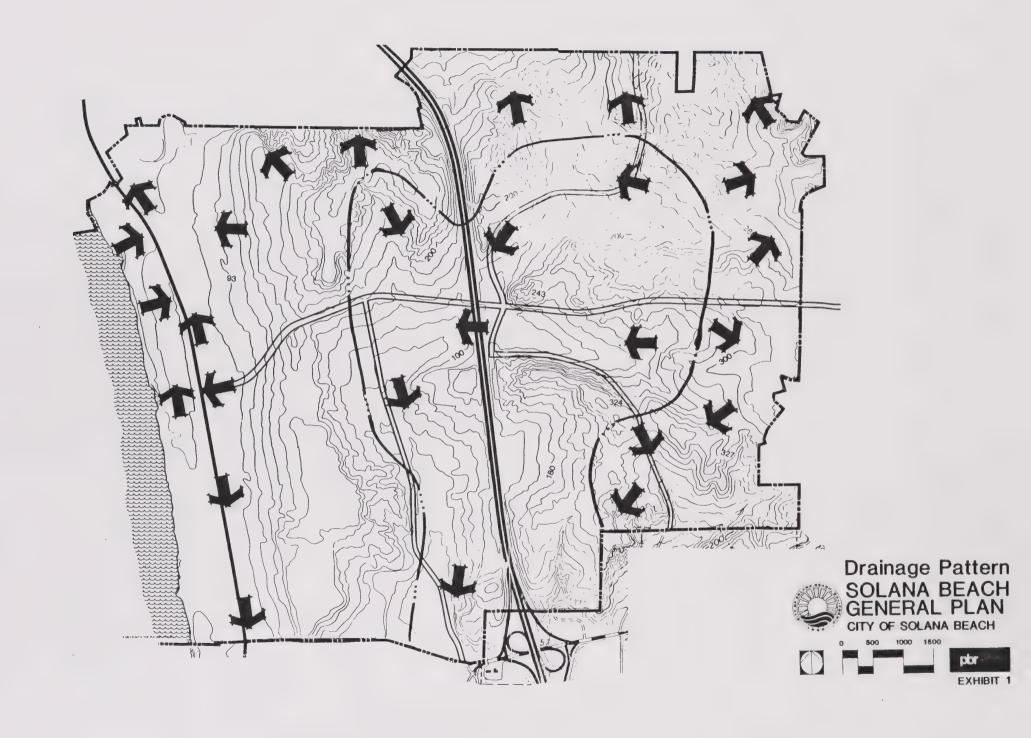
As shown on Exhibit 1, drainage from the central and south portions of Solana Beach generally flows in a southern direction to the San Dieguito River. The north and northwest portions of the city drain into the San Elijo Lagoon. As described in Section 2.4 of this element, the lagoon is a highly sensitive wetlands area. Therefore, it is very important that Solana Beach minimizes its flow of water pollutants resulting from urbanization. Such pollutants may include automobile residue, heavy metals, eroded soil, nutrients (nitrogen and phosphorus), and coliform organisms.1 Common methods that cities can use to minimize water pollutant loads involve requiring erosion control measures at construction sites and implementing periodic street sweeping programs.

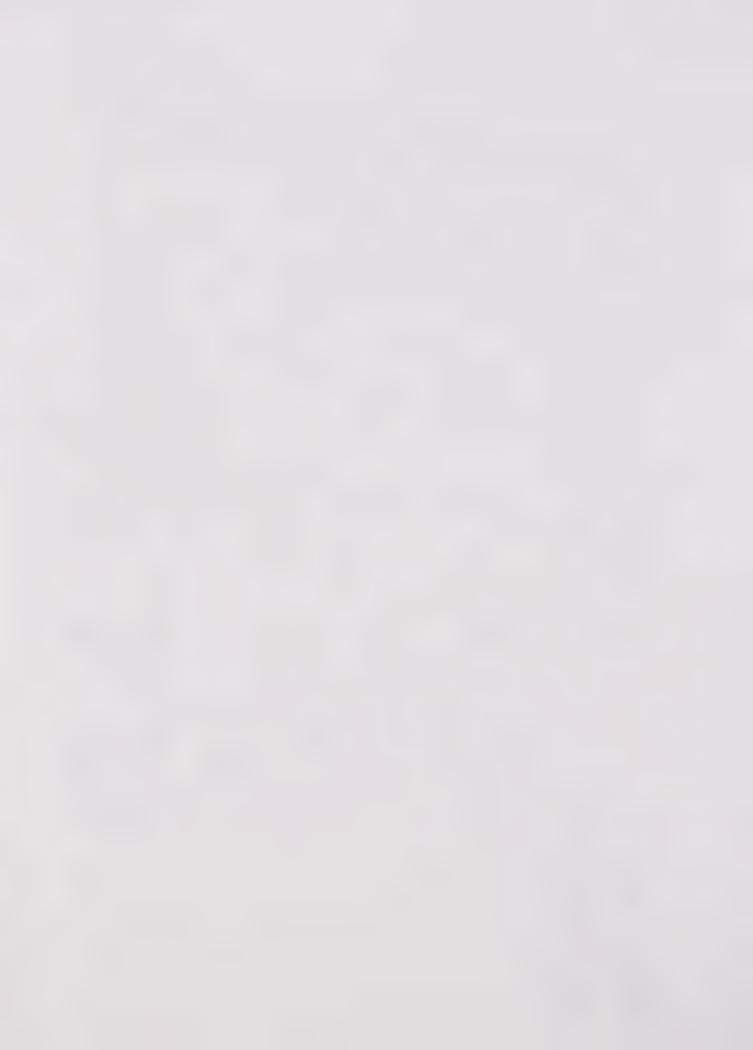
2.1.2 Domestic Water Supply

The city of Solana Beach is served water by the Santa Fe Irrigation District (SFID) and the Olivenhain Water District which obtain most of their water from the San Diego County Water Authority (SDCWA) - Metropolitan Water District system. The SDCWA imports water and sells it to member agencies such as SFID. More than ninety percent of the SDCWA water supply consists of water imported from the Colorado River and northern California sources.

The SFID purchases unfiltered water from the SDCWA system and treats it in the 36 mgd (million gallons per day) Badger Filtration Plant owned jointly with the San Dieguito Water District. The plant is connected to the SDCWA filtered water aqueducts in the event of shutdown of the SDCWA unfiltered water pipelines or the Badger Filtration Plant.

American Chemical Society, <u>Cleaning Our Environment: A Chemical Perspective</u>, 1978.





The SFID also purchases water from the city of San Diego when runoff is available in Lake Hodges. The water, when available, is low priced. The existence of Lake Hodges and its delivery system provides a supply which is available in case of failure of the imported water system. The contract with San Diego extends until 2019.

It is the policy of MWD that it will supply the water needs within its service area. A firm supply through the year 2010 does not now exist, but it is the belief of the MWD that it will meet the water needs of the area.

Based on the SFID's 1972 master plan,1 future water consumption will occur at a rate of approximately 0.22 acre-feet per capita per year. Solana Beach is expected to reach a population of approximately 18,317 at build-out of the general plan.2 Thus, the annual demand for water following buildout would be approximately 4,030 acre-feet. This is well within the SFID master plan projection for ultimate annual water demand in Solana Beach of approximately 6,116 acre-feet annually.3 Therefore, it is anticipated that Solana Beach's ultimate demand for water will be met by the SFID.

2.2 FLORICULTURE

2.2.1 Existing Operations

The principal existing "agricultural" activity in the city is the Matsumoto Floricultural Fields. These operations involve the cultivation of a variety of flowers on an approximately 15-acre site located north of Patty Hill Drive between Rios Avenue and Barbara Avenue. These flowers include carnations, tiger lilies, and iris.

The only other agricultural activity in the city is in a residentially zoned area located along Nardo Avenue and north of Nardito Lane. This site has been used historically for agricultural activities pre-dating existing zoning regulations.

3 Ibid., p. 14.

James M. Montgomery Consulting Engineers, Inc., Santa Fe Irrigation District: Updated Master Plan for Water System Development, October 1972.

² Based upon an overall factor of 2.66 persons per dwelling unit and a total of 6,886 dwelling units at general plan buildout.

Although gardens and greenhouses are allowed in residential neighborhoods under existing San Diego County zoning, they are not considered as existing "agricultural" uses since they are merely accessory uses on sites designated for residential use.

2.2.2 Future Operations

The general plan designates the Matsumoto site for agricultural use to provide for the continuation of floricultural activities. Further, such designation will preclude adverse impacts upon San Elijo Lagoon that could otherwise occur from development of the site.

The general plan does not provide for agricultural land uses at any other site within the city. The area being used for agriculture east of Nardo Avenue is designated in the land use element as low-medium residential (four dwelling units per acre).

2.3 AIR RESOURCES

2.3.1 Types of Pollutants, Pollutant Sources, and Air Quality Standards

Air pollution is generally defined as the contamination of the outdoor atmosphere resulting from human activities. In its so-called pure state, air is a gaseous mixture of nitrogen (78 percent), oxygen (21 percent), carbon dioxide (0.03 percent), inert gases such as argon (less than one percent) and traces of water vapor.

Air contaminants may be associated with natural occurrences such as volcanic eruptions, forest fires, etc. The air pollutants associated with human activities are generally classified as primary and secondary contaminants. Primary contaminants are those emitted directly by a source into the atmosphere. Secondary contaminants are formed in the atmosphere by chemical reactions of primary contaminants. The key primary and secondary air pollutants of concern are described below.

Ozone (0_3) is a colorless gas with a sharp odor. It is formed in the atmosphere by a complex series of sunlight-induced chemical reactions

involving oxides of nitrogen and hydrocarbons. Peak concentrations generally occur during the middle of the day since the reaction rate is directly related to the intensity of sunlight.

Carbon monoxide (CO) is a colorless, odorless gas formed by the incomplete combustion of fossil fuels. Approximately 92 percent of CO in the atmosphere is emitted by mobile sources such as trucks and automobiles. Thus, CO concentrations are generally highest in or near areas of high traffic volumes.

Oxides of nitrogen (NO_X) are composed of nitric oxide (NO) and nitrogen dioxide (NO_2) . NO is a colorless gas emitted from mobile sources and stationary sources. NO_2 is a brownish gas formed in the atmosphere by the oxidation of NO emissions.

Sulfur oxides (SOx) are byproducts of fossil fuel combustion. The principal oxide of sulfur produced in combustion is sulfur dioxide (SO₂), a colorless gas with a pungent odor. Stationary sources such as power plants and petroleum refineries are primary sources of SO₂ emissions. SO₂ readily combines with oxygen to form sulfur trioxide (SO₃), which reacts quickly with water vapor to form sulfuric acid.

Total suspended particulate (TSP) is a complex mixture of materials suspended in the atmosphere such as soil particles, sea salt, sulfates, nitrates, lead, and a variety of organic compounds. Table 1 summarizes the principal sources and effects of air pollutants.

2.3.2 Existing Air Quality Conditions

Ambient air quality in San Diego County is measured through a system of monitoring stations established at various locations throughout the county. These stations are operated by the San Diego Air Pollution Control District.

The station nearest to Solana Beach is in Del Mar. However, the only air pollutant measured at this station is ozone. The Oceanside monitoring station is considered most representative of Solana Beach's ambient air

TABLE 1 AIR POLLUTANT SOURCES AND EFFECTS

GENERAL INFORMATION ON POLLUTANT EFFECTS

POLLUTANT & SOURCES PO

NO2 (Nitrogen Dioxide) Mobile sources, combustion of fossil fuels.	Produces distinctive brownish atmospheric discoloration. Causes eye, nose and throat irritation in humans and affects the lungs, causing increased susceptibility to respiratory infection. Can cause suppression of plant growth.
CO (Carbon Monoxide) Mobile sources, incineration petroleum production, power generation plants.	Harmful effects are headaches, slowed reactions and fatigue. Can cause interference with oxygen transport in blood.
SO2 (Sulfur Dioxide) Mobile sources, petroleum production. Burning of fossil fuels with high sulfur content.	Forms sulfuric acid aerosols which corrode building materials, boat and car finishes, etc. These acid aerosols penetrate the lungs and damage tissues. Rapidly converts to SO4 (particulate aerosols) in the atmosphere.
O3 (Ozone) Secondary photochemical product from HC + NOx reacting in the presence of sunlight and critical temperatures.	From mild eye irritation to possible impairment of lung function. Aggravation of respiratory and cardiac diseases, pulmonary dysfunction. Damage to vegetation: from ornamental plants to commercial food crops.
TSP (Particulate Matter) Mineral Extraction & production, demolition/construction, agricultural practices, natural sources(wind blown), fire, paved and unpaved roads.	Reduces visibility, and if in small enough, particles, can be carried to the lungs. Many of the suspended particulates are toxic and are deposited on the food stuffs of animals and people.
SO4 (Sulfates) Due to conversion of SO2 from stationary and mobile sources.	Aggravation of respiratory and pulmonary disease. Produces significant reduction in visibility. Damage to vegetation.

SOURCE: SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT. 1985 ANNUAL REPORT.

Table 2
AMBIENT AIR QUALITY1

Number of Days State/Federal
Standard Exceeded: [Maximum Concentration]2

		Stallua	id Exceeded,	LHax mium	- Concentration
Pollutant		Loca	11y3	County	wide
Ozone	1984	43/8	[.26]	146/51	[.28]
(03)	1985	48/12	[.18]	148/50	[.22]
	1986	43/13	[.19]	131/42	[.19]
Carbon monoxide	1984 1985	0/0 0/0	[7.0] [8.0]	0/0 0/5	[16.0] [17.0]
(CO)	1986	0/0	[6.0]	0/3	[16.0]
Nitrogen	1984	O/NA	[.23]	O/NA	-[.23]
dioxide (NO ₂)	1985	O/NA O/NA	_	O/NA O/NA	
	1986	O/NA	[.21]	O/NA	[.22]
Sulfur dioxide	1984		[.02]	0/0	[.09]
(SO ₂)	1985 1986	0/0 0/0	[.06] [.02]	0/0 0/0	[.08]
	1900	0/0	[•02]	0/0	[.00]
D	5004	2 7/0	F1007	14 1/0	[1.CA]
Particulates4	1984 1985		[102] [124]	14.1/0 23.8/0	[164] [176]
	1986	0/0	[98]	17.0/0	[214]

2 Particulates indicated in micrograms per cubic meter (ug/m^3). All other concentrations indicated in parts per million (ppm).

3 Data from Del Mar monitoring station (ozone) and Oceanside monitoring station.

4 Expressed as percentage of samples taken.

¹ Air Resources Board, <u>California Air Quality Data</u>, 1984-1986, Vols. XVI-XVIII.

quality for other pollutants. Annual air quality data for 1984 through 1986 for these stations are provided in Table 2.

As shown on Table 2, existing air quality in the Solana Beach area is generally good. Ozone and particulates are the only pollutants that have consistently reached levels exceeding state or federal standards during recent years.

2.3.3 Impacts Resulting from General Plan Buildout

Pursuant to the land use element, the land use mix established for this general plan program is summarized in Table 3.

Table 3
LAND USE MIX AT GENERAL PLAN BUILDOUT

Land Use	Acreage
Estate Residential	280.5
Low Density Residential	253.2 375.5
Low/Medium Density Residential Medium Density Residential	147.0
Medium/High Residential	80.5
High Density Residential	139.8
Subtotal	1,276.5
General Commercial	114.8
Light Commercial	1.9
Special Commercial Light Industry	33.7 13.1
Public/Institutional	79.3
Office/Professional	22.4
Open Space/Recreation Agriculture	231.1 12.8
Right-of-Way	88.5
Subtotal	1,874.1
	•
Roads	337.4
TOTAL	2,211.5

Table 4 provides a summary comparison of total annual emissions for the city's existing land use mix versus total annual emissions for the city's future land use mix. As shown, buildout under the adopted land use plan would lead to a slight increase in annual stationary source emissions and a decrease in mobile source emissions. The projected decrease in mobile

source emissions may be attributable to two factors. First, slight changes in the mix of land uses provided for in the general plan will result in a decrease in home-based vehicle trips. Thus, fewer vehicle miles of travel will occur thereby leading to a decrease in air pollutant emissions originating from automobiles. The second factor is that anticipated improvements in the automobile emission control technology would lead to fewer emissions per vehicle mile of travel. In summary, the projected decrease in mobile source emissions will more than offset the minor increase in stationary source emissions and will ultimately yield an overall decrease in total air pollutant emissions.

Table 4
EXISTING VERSUS FUTURE EMISSIONS1
(Tons/Year)

	Statio Sour		Mobil Sourc		Total Emissi	ons
Pollutant	Existing	Future	Existing	Future	Existing	Future
Carbon monoxide Oxides of nitrogen Hydrocarbons Particulates Oxides of sulfur	11.93 64.02 1.47 1.61 4.72	12.83 67.16 1.66 1.65 4.86	7713 464 1006	5957 337 749 -	7724.93 528.02 1007.47 1.61 4.72	5969.83 404.16 750.66 1.65 4.86

The county of San Diego is an area which exceeds ambient air quality standards for ozone and total suspended particulates and is therefore considered a "non-attainment" area with respect to meeting air quality goals established pursuant to the federal Clean Air Act Amendments of 1977. The San Diego portion of the 1982 "State Implementation Plan Revision" outlines a program designed to achieve healthful levels of air quality in the region. The program takes into account the additional sources of pollution likely to accompany anticipated growth and development in the county pursuant to demographic projections established by the San Diego Association of Governments.

Based upon South Coast Air Quality Management energy consumption factors and the California Air Resources Board's URBEMIS #1 Air Quality computer model (which does not model particulate and SOx emissions).

It is therefore important to ensure that the city of Solana Beach's projected growth does not contribute substantially to adverse long-term effects upon air quality associated with cumulative growth in the county. It is also important to ensure that Solana Beach's local air quality environment retains its good quality.

Given the fact that automobile emissions represent the predominant source of emissions in the region, land use policies which provide for reduced automobile use are essential for the region's ability to attain and maintain healthful air quality levels. Examples of such measures are outlined below.

- Encourage the mixture of residential and commercial uses in and around commercial areas.
- 2. Encourage development which maintains a balanced relationship between jobs and housing to minimize the extent of commuter travel.
- 3. Establish a network of bicycle trails to facilitate non-automobile transportation.
- 4. Encourage new developments to provide convenient access from bikeways and public transit stops.
- 5. Restrict the development of auto-dependent facilities such as drivethrough restaurants.
- 6. Integrate long-range planning and project approval procedures with air quality planning requirements.
- 7. Implement traffic circulation system improvements to improve traffic flow to minimize increased emissions resulting from inefficient automobile operations.

Implementing measures such as those listed above are key ways that the city of Solana Beach could contribute to minimizing the potential adverse air quality effects associated with future growth and development in the city.

2.4 BIOLOGICAL RESOURCES

2.4.1 Introduction

A commitment to the conservation of biological resources begins with the recognition that human beings are part of our environment rather than apart from it. Our well being, if not our ultimate survival, depends upon our ability to minimize the degree to which human activities upset the fragile balance of natural systems. Given our incomplete understanding of the intricate web of relationships within our biosphere, a conservative approach is necessary in weighing pressures for increased urbanization with the need to preserve sensitive ecosystems.

To facilitate efforts to minimize the destruction of important biological resources due to development, this subsection of the conservation and open space element provides an inventory of sensitive resources in the Solana Beach area and a description of key considerations related to buildout of Solana Beach pursuant to the land use element of the general plan.

2.4.2 Inventory of Biological Resources

The San Elijo Lagoon is a sensitive biological resource located adjacent to and partially within the northwest portion of the city. As noted in the conservation element of the San Diego County General Plan, "[1]agoons... are of extraordinary ecological importance because they exist at the interface between air, fresh water, salt water, and land ecosystems."1 The San Elijo Lagoon/Holmwood Canyon-San Dieguito Park area is of particular importance because it supports populations of endangered bird species such as the least tern and the Belding's Savannah sparrow, and the declining snowy plover. The area also includes rare and endangered plant species such as San Diego thornmint, coast barrel cactus, coast white lilac, Cleveland sage chocolate lilies, and coast spice bush.² The city of Solana Beach recognizes its ability to contribute toward the overall biological quality of the lagoon area through appropriate land use policies and planning.

County of San Diego, Conservation Element of the San Diego General Plan, revised May 1983, p. X-33.

² Ibid., p. X-K-25.

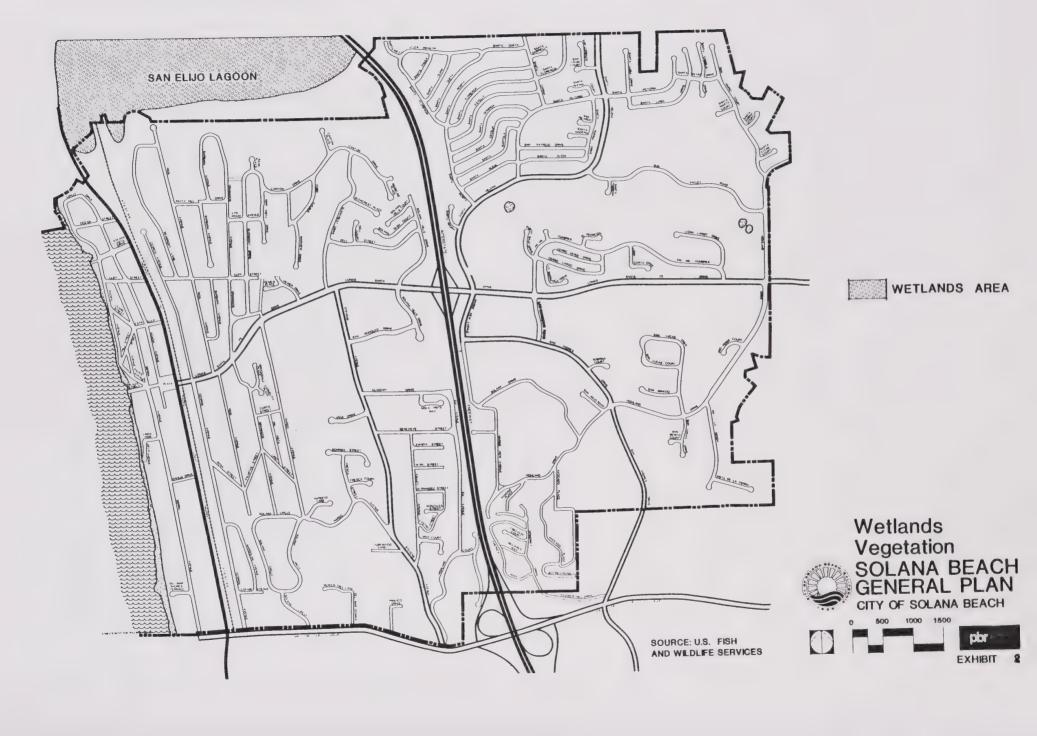
Biological resources exist throughout the city of Solana Beach. The most common forms of biological resources include landscaping introduced in conjunction with urban development, horticultural activity, and grassland and chaparral on undeveloped hillside areas. While important to some degree, these resources do not represent unusual or extremely sensitive habitats. However, the age and nature of some trees located in the city could warrant preservation based more on heritage considerations as opposed to biological sensitivity.

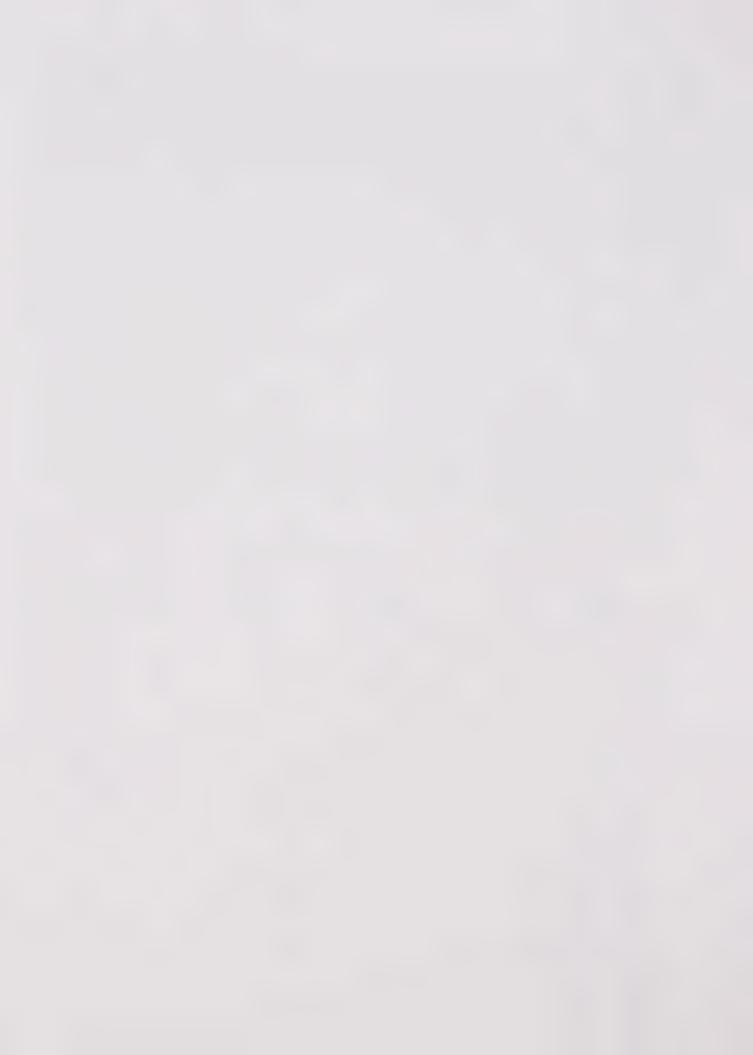
Of paramount concern are rare and endangered species and areas classified as wetlands. Within the Solana Beach city limits, natural habitat areas are practically non-existent since the city is almost completely urbanized. Although no rare or endangered species have been identified within the city, several rare and endangered species exist at the San Elijo Lagoon. As shown on Exhibit 2, the only wetlands identified in the city through the United States Fish and Wildlife Service's "National Wetlands Inventory" program are man-made ponds on the Lomas Santa Fe Golf Course, small portions of the San Elijo Lagoon and the city's coastline.

2.4.2 Effects of General Plan Buildout

Buildout of the general plan is expected to involve the development of existing vacant parcels and the recycling of some areas that are already developed. Such activity is not expected to affect any sensitive biological resources within the city.

The general plan provides for the retention of open space and floricultural land uses within the northwestern portion of the city adjoining San Elijo Lagoon. By limiting possibilities for new development in this area, the city expects to minimize the potential for adverse effects upon the lagoon resulting from general plan buildout.





2.5 CULTURAL/SCIENTIFIC RESOURCES

Introduction

Cultural resources generally consist of archaeological sites and historic sites that offer important links to our prehistoric and historic heritage. Although the California Government Code does not require consideration of cultural resources in general plans, the city of Solana Beach has chosen to include such considerations in the general plan because of their inherent importance to the Solana Beach community. It should also be noted that the preservation of these resources is mandated by the California Environmental Quality Act and is important for two basic reasons. One reason is respect for the values of Native Americans and their concern that the remains of their ancestors are left undisturbed. The second reason involves the value of these resources for anthropological and historical research. Historic structures are also a major concern since they represent important links to the heritage of Solana Beach.

A related concern is the scientific value of paleontological resources. These resources consist of subsurface prehistoric fossils. They are important for their value as specimens used in the study of the Earth's natural history.

The following subsections briefly describe cultural and scientific resources as they relate to Solana Beach.

2.5.1 Archaeological Resources

An October 1987 records search was conducted by San Diego State University's (SDSU) Institute for Public and Community History. The search indicates the presence of six known archaeological/historical sites within the city and 45 such sites within one mile of the city. The precise location and nature of these sites is not released to the general public in the interest of preventing disturbance of the sites. Such information is maintained on file with the city for use in identifying potential effects associated with future land development. The SDSU Institute for Public and Community History recommends that cultural resource surveys be conduc-

ted prior to any ground-disturbing activities to determine the presence of any significant cultural resources.

2.5.2 Historic Resources

Historic resources generally consist of buildings or landmarks that are significant either in terms of their relationship to local history or in terms of their unique architectural character. Solana Beach's history dates back to the early 20th century. The area was originally settled around 1908 by George Jones. Although this area was known as Lockwood Mesa until Colonel Ed Fletcher of the Santa Fe Land and Improvement Company purchased the townsite in 1922, there exists a house at the top of Del Mar Downs Road that dates to as early as the turn of the century. On March 5, 1923, Fletcher filed the original subdivision map of Solana Beach. The community has grown from an agricultural community to a highly developed urban area.

According to long-time residents of the city, nearly all of the city's earliest structures have given way to new development. The oldest remaining structure is generally believed to be the Gonzales House on the 700 block of Ida Street in the Eden Gardens area. This house was constructed prior to 1925 and has been well maintained. As a link to the earliest days of Solana Beach, the Gonzales House is considered an an important local historic resource.

2.5.3 Paleontological Resources

Paleontological resources are prehistoric plant and animal fossils embedded in subsurface geologic materials. They are important resources used in the conduct of natural history research in that they help to reveal the nature of biological evolution and geologic changes. The geologic formations in Solana Beach consist of marine sedimentary deposits which are expected to contain fossils. However, no significal fossil localities have been identified within the city. The localities found nearest to Solana Beach are situated along the coast between Del Mar and La Jolla.1

California Division of Mines and Geology, <u>Geology of San Diego Metro-politan Area</u>, California - Bulletin 200, 1975.

These resources include fossil mollusk localities, fossil calcereous nannoplankton localties, and fossil mammal localities. Aquatic shell fossils have also been found at the northwest corner of the city of Solana Beach, and they may extend into the city in very small areas.

A method to identify potentially significant paleontological resources in the city is to require a paleontological survey in conjunction with any future ground-disturbing construction activity. Should any such resources be unearthed, a paleontologist could be empowered to halt grading activities until the resources are sufficiently retrieved.

2.6 ENERGY RESOURCES

2.6.1 Available Energy Supply

Solana Beach's non-transportation energy supply consists of natural gas and electricity supplied by the San Diego Gas and Electric (SDG&E) company. The city's electrical needs are served by SDG&E's substations in Del Mar, Encinitas, and Rancho Santa Fe. SDG&E provides electrical power flow using an integrated mix of primary energy resources - oil, natural gas, hydropower, coal, geothermal, co-generation and nuclear. A substantial portion of SDG&E's electrical supply is purchased from other utilities. Similarly, SDG&E purchases its entire natural gas supply from Southern California Gas Company.

2.6.2 Existing Energy Demand

Tables 5 and 6 below provide specific energy consumption factors considered applicable to land uses in Solana Beach.

Table 5
AVERAGE MONTHLY CONSUMPTION OF NATURAL GAS1

Land Use	Quantity
Single Family Residential Multi-Family Residential Office Commercial Public/Institutional Industrial	6,665 cubic feet per unit 3,918 cubic feet per unit 2.0 cubic feet per sq. ft. 2.9 cubic feet per sq. ft. 2.0 cubic feet per sq. ft. 3.3 cubic feet per sq. ft.

¹ Source: Southern California Gas Company, 1986.

Table 6
ANNUAL ELECTRIC ENERGY USAGE1

Land Use	Quantity
Residential	6,081 kilowatt hours per dwelling unit
Office	8.8 kilowatt hours per square foot
Retail	11.8 kilowatt hours per square foot
Public/Institutional	8.8 kilowatt hours per square foot
Industrial	8.8 kilowatt hours per square foot

¹ Source: Southern California Edison, 1985.

Based on the energy consumption factors identified above and existing land use characteristics (as of 1988), it is estimated that approximately 78,731.6 megawatt hours of electricity are consumed annually in Solana Beach. Annual natural gas consumption is approximately 406.1 million cubic feet.

2.6.3 Impacts Resulting from General Plan Buildout

The Solana Beach General Plan Land Use Element identifies the mix and quantity of land uses to be developed in Solana Beach. Based upon the energy consumption factors provided in Section 2.6.2 and the maximum general plan buildout scenario, Solana Beach's ultimate natural gas consumption is projected at approximately 442.8 million cubic feet annually while electrical consumption is projected at approximately 84,657.2 megawatt hours annually. These consumption levels represent increases of approximately 9.0 percent for natural gas and 7.5 percent for electricity. These increases are not significant and are within the parameters of SDG&E's projected load growth for the Solana Beach area.

As new development occurs and older structures are refurbished, opportunities to implement energy conservation measures should be taken. Appropriate planning and structural design techniques will serve to minimize increasing demands for non-renewable resources and will reduce Solana Beach's vulnerability to future energy supply shortages. Further, such measures will serve larger regional and national interests in terms of minimizing Solana Beach's dependency on non-renewable energy supplies.

Energy savings also can be achieved through land planning that encourages a balance between residents and employees (ie., reducing the need for long commutes from home to work) and planning that maximizes opportunities for the use of non-automobile or public transportation.

Title 24 of the California Administrative Code contains building code provisions regarding energy conservation measures to be used in structural design. These measures involve proven technologies such as building insulation, weatherstripping, insulation of water heaters and pipes, water flow restrictors, and energy-efficient lighting systems. By incorporating Title 24 considerations into the design review process, the city can contribute to the goal of minimizing increased energy consumption levels.

In addition to conservation measures, the city can encourage the exploitation of renewable energy resources such as solar energy. For example, land use planning that facilitates solar access serves to encourage the use of renewable solar energy for space heating and water heating rather than continued use of fossil fuels.

2.7 OPEN SPACE AND VISUAL RESOURCES

2.7.1 <u>Importance of Open Space</u>

As stated in Government Code Section 65561, "...the preservation of open space land...is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources."

The inherent importance of providing for adequate open space is to supply breaks in the pattern of development which offer visual relief from intense urban environments. Further, the provision of open space is important to facilitate the wise use of natural resources and to protect public health and safety. Section 1.3 of this element cites Government Code Section 65560(b), which identifies four basic categories of open space considered necessary and appropriate for the provision of a balanced urban development pattern. These categories are described below in relation to conditions in Solana Beach.

First, open space for the preservation of natural resources is important to protect sensitive ecological systems. For example, wetlands habitat areas and rare and endangered plant and wildlife communities are often designated as open space to preclude development activities that might destroy significant biological resources. As discussed previously in Section 2.4, the San Elijo Lagoon located immediately northwest of the city represents a significant wetlands area of concern. The Solana Beach general plan designates open space along the area north of Canyon Drive to protect the lagoon from adverse effects that might otherwise occur with urbanization of these areas.

Second, open space used for the managed production of resources is important to maintain adequate supplies of food and fiber. Thus, agricultural lands and mineral resource zones are often designated as open space to ensure their continued productivity. In Solana Beach, the area located north of Patty Hill Drive (between Rios Avenue and Barbara Avenue) is designated for agricultural use to provide for the continuation of existing floricultural operations.

Third, open space used for outdoor recreation is important to meet the community's recreational and cultural needs. Parkland and beaches are examples of this type of open space. Solana Beach offers approximately 1.26 miles of coastline used for beach recreation, the four-acre La Colonia Park, and the Lomas Santa Fe Golf Courses. In addition, the city is adjacent to major regional open space areas in the form of San Dieguito Park, Holmwood Canyon and San Elijo Lagoon. The provision of an adequate level of parks and recreational opportunities is important to maintaining a well-balanced community.

Fourth, open space for public health and safety is important to preclude or minimize potential hazards associated with floods, fires, slope stability, and earthquakes. Further, public health and safety interests may necessitate the designation of open space areas to protect the quality of water resources. In Solana Beach, open space is designated in the Holmwood Canyon area partly as a measure to manage potential fire hazards. Similarly, open space designated on the coastal bluff overlooking Fletcher Cove is partly intended to ensure that safety hazards involving bluff stability are minimized.

2.7.2 Types of Open Space

PERMANENT OPEN SPACE

In general, land uses expected to remain committed to open space usage during the life of a general plan are regarded as permanent open space. For example, Solana Beach Park (also known as Fletcher Cove), Tide Park Beach, La Colonia Park, Lomas Santa Fe Country Club, and Lomas Santa Fe Executive Golf Course are typical of permanent open space uses (Exhibit 3). Other types of permanent open space areas include school playgrounds and the Holmwood Canyon area.

INTERIM OPEN SPACE

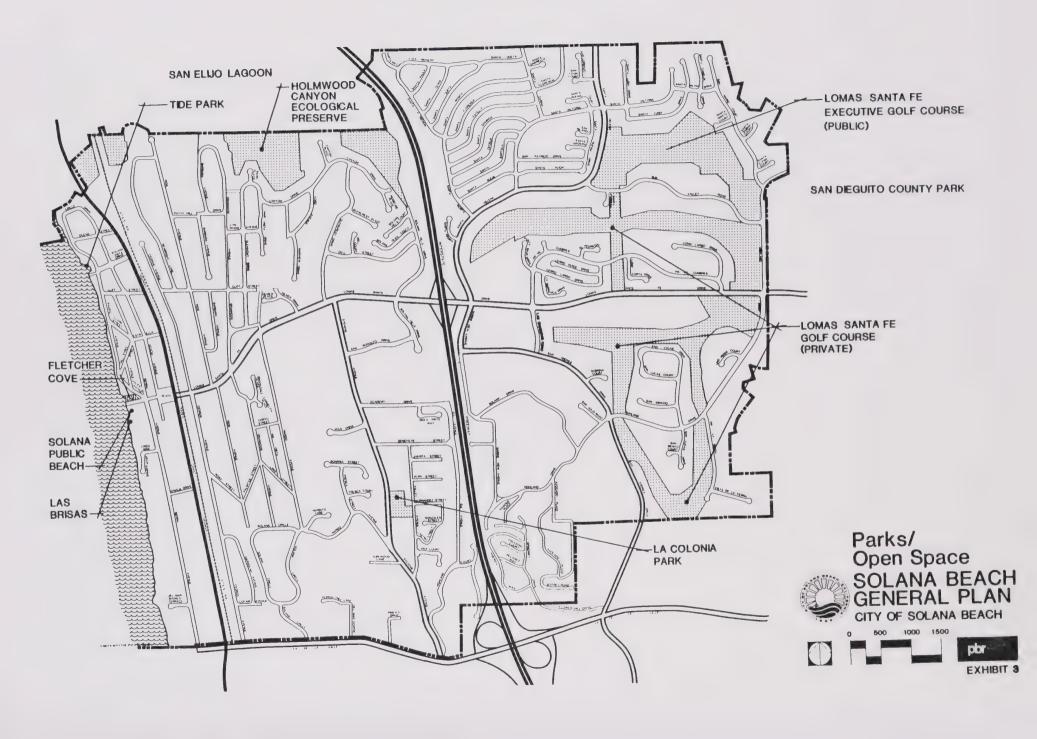
Interim open space areas are typically private properties that are currently vacant or used for agriculture. Unlike permanent open space uses, which are usually publicly owned sites, vacant lands can be expected to be developed sometime during the life of the general plan. Until such time as development occurs, these land uses offer temporary open space values. In Solana Beach, the vacant land located southeast of the Lomas Santa Fe Drive/Granados Avenue is an example of interim open space since it is designated for future residential development.

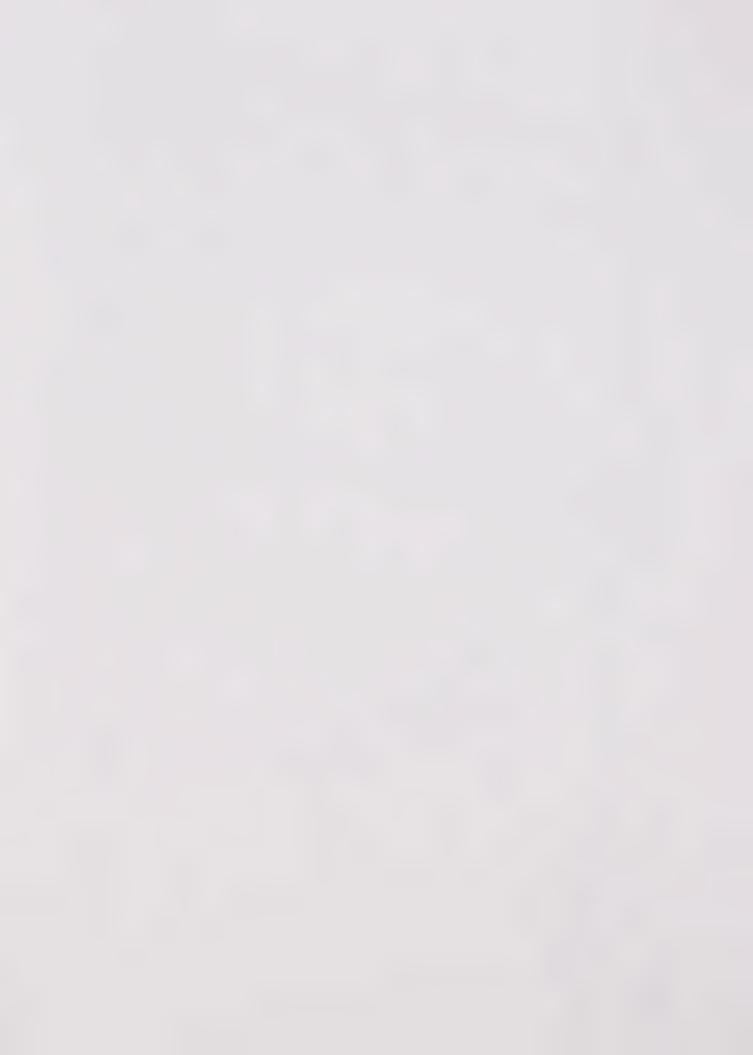
2.7.3 Unique/Significant Open Space and Visual Features

The city of Solana Beach offers several open space features within and around the community. The key open spaces within the city include beaches, parks, and golf courses described previously and shown on Exhibit 3 as well as the Holmwood Canyon area adjoining San Elijo Lagoon. The lagoon and San Dieguito Park are significant open space features adjacent to the northwestern and eastern portions of the city, respectively.

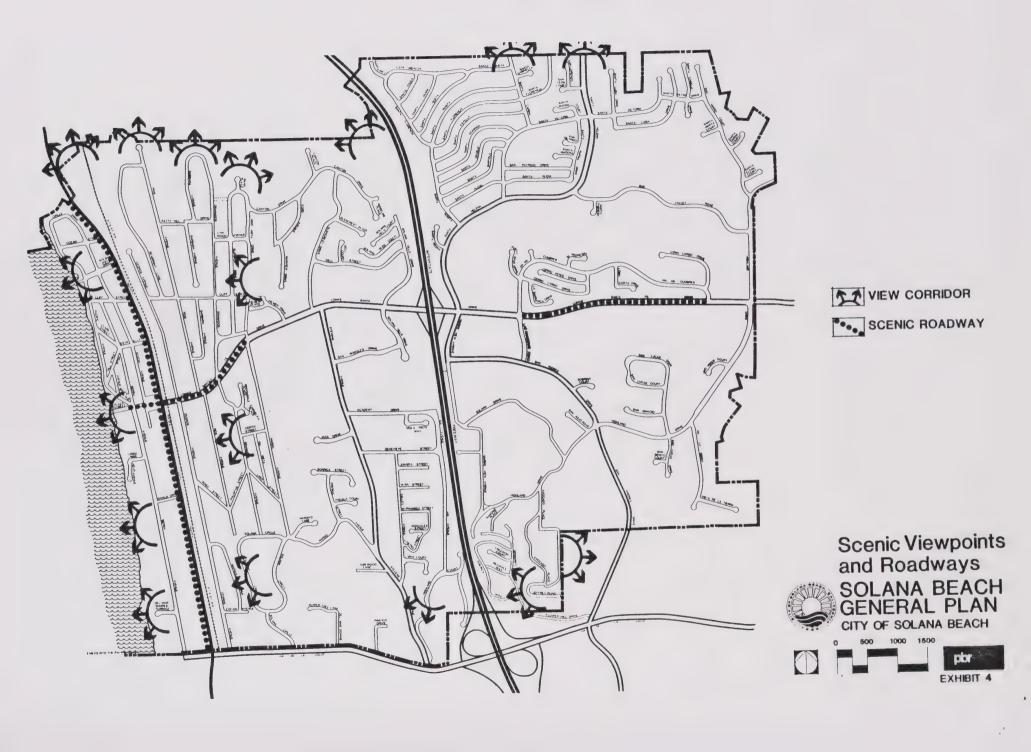
The most significant visual feature in Solana Beach is the Pacific Ocean. Scenic ocean views are available from several vantage points due to the city's hilly terrain. As shown on Exhibit 4, the most scenic viewpoints are found at Las Brisas Viewpoint (a small clifftop area south of Solana Beach Park), along Solana Circle, and in the vicinity of the Avocado Place/

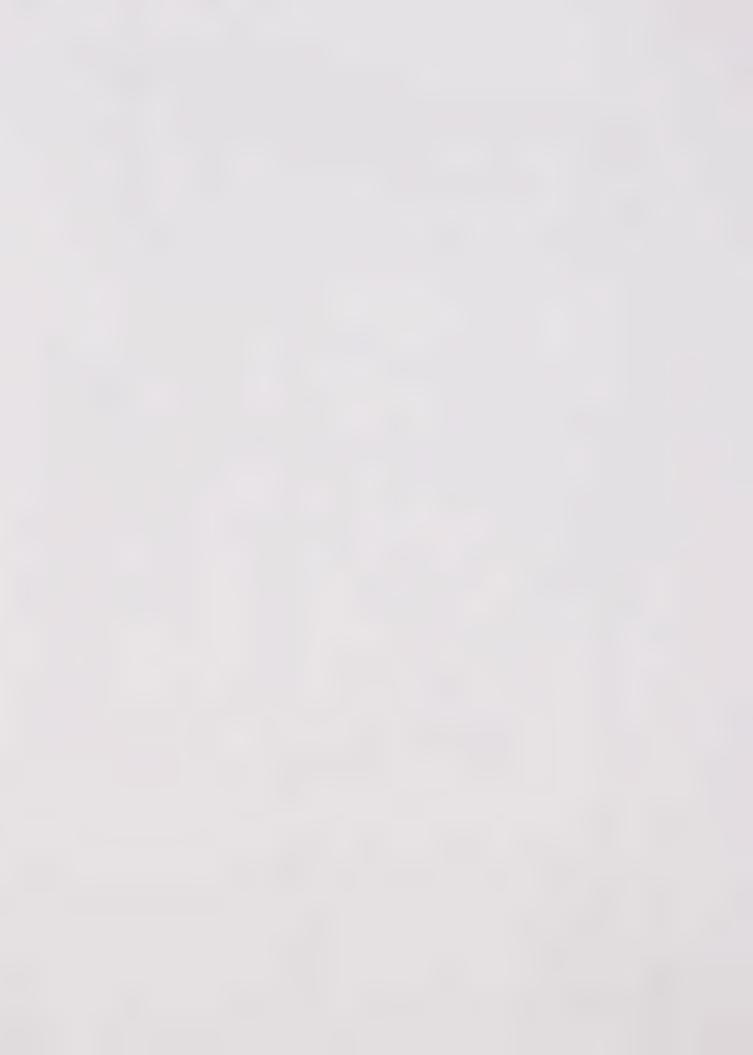






Jeffrey Road intersection. Further, motorists heading west on Lomas Santa Fe Drive west of Nardo Avenue are afforded particularly scenic views of the ocean. Other scenic views are available to residents overlooking the golf courses in the eastern portion of the city and to residents overlooking the Holmwood Canyon/San Elijo Lagoon area.





3.0 GOALS, OBJECTIVES, AND POLICIES

GOAL 3.1

TO PROTECT AND CONSERVE THE CITY'S NATURAL AND CULTURAL RESOURCES

Objective 1.0

Ensure that the quality of water resources do not violate state and federal water quality standards as a result of development within the city of Solana Beach.

<u>Policy 1.a</u> The city shall cooperate with District 15 of the Regional Water Quality Control Board and other agencies within San Diego County in the implementation of the 208 water quality program.

Policy 1.b The city shall require the incorporation of adequate erosion control measures into development projects that may otherwise impact water resources adversely. Such measures shall be reviewed by the Planning and Engineering Departments and shall include sandbagging of newly graded slopes, prompt planting of disturbed areas, phasing of grading and construction activities to minimize exposed areas susceptible to erosion, and the routing of runoff flows through desilting basins prior to discharge into any watercourse.

<u>Policy 1.c</u> The city shall continue its street sweeping program to minimize the urban pollutant load which enters the city's drainage system.

<u>Policy 1.d</u> The city shall encourage the use of minor natural watercourses as local open spaces.

<u>Policy 1.f</u> The city shall participate in cooperative agreements with other agencies in programs which encourage research and establishment of innovative sewage treatment methods as alternatives to ocean outfall and septic tanks.

Objective 2.0

Maintain adequate domestic water supplies for all residents and uses within the city.

<u>Policy 2.a</u> The city shall require all new developments to incorporate water conservation measures into project design to the greatest extent possible. Such measures may include, but are not limited to, the use of plumbing fixtures which reduce water usage (in accordance with Title 24 of the California Administrative Code) and xeriscape landscaping which maximizes the use of drought-tolerant plant species and drip irrigation systems.

<u>Policy 2.b</u> The city shall support projects involving water reclamation (such as the San Elijo treatment plant) by using reclaimed water for irrigation of public landscaped areas to the greatest feasible extent. Further, the city shall encourage the use of such water in privately owned areas.

Policy 2.c The city shall cooperate with the San Diego County Water Authority, the Metropolitan Water District of Southern California, and the Santa Fe Irrigation District by providing the agencies with general plan buildout projections and by keeping the agencies fully informed of amendments to the general plan which may affect the district's planning for the provision of adequate water supplies.

Objective 3.0

Conserve and recycle important resources.

<u>Policy 3.a</u> The city shall participate in the county's efforts to recycle waste products such as glass, broken concrete, asphalt, etc. for use as construction materials.

Policy 3.b The city shall encourage efforts to increase public participation in recycling.

Objective 4.0

Encourage sound environmental planning practices in all developments.

<u>Policy 4.a</u> The city shall use the environmental review procedures established by the California Environmental Quality Act (CEQA) to ensure that potential adverse effects upon natural and cultural resources are identified.

<u>Policy 4.b</u> The city shall not permit land uses that would have unavoidable significant adverse impacts upon natural or cultural resources unless a statement of overriding considerations is adopted by the Solana Beach City Council.

<u>Policy 4.c</u> Technical reports made available to the public in conjunction with environmental documentation shall include summaries written for laypersons (eg., soils and geology reports that minimize the use of technical jargon).

Objective 5.0

Preserve important biological habitat and protect sensitive, rare, and endangered species of flora and fauna.

<u>Policy 5.a</u> The city shall require that all development proposals provide adequate mitigation measures for identified significant biological resources, including selective preservation, replanting, sensitive site planning techniques, the provision of replacement habitat, and/or other appropriate measures.

<u>Policy 5.b</u> The city shall preserve sensitive habitat areas as permanent open space.

<u>Policy 5.c</u> The city shall establish a heritage tree program which identifies mature trees that are to be preserved and protected from public and private development activities. Further, this program shall set forth procedures to be followed by the city staff in the site plan review process

to ensure compliance with the program and shall outline appropriate measures to preserve mature trees.

Policy 5.d Permanent open space preserves designated for the purpose of protecting biological resources shall be managed primarily for their inherent ecological value. Recreational uses shall be considered a secondary activity. The use of hiking and riding trails shall be monitored periodically by a qualified biologist to determine their impact and viability as uses compatible with the biological preserve.

<u>Policy 5.e</u> The city shall cooperate with other appropriate agencies as necessary to preserve significant habitats in rapidly developing areas, including the acquisition of important habitats.

<u>Policy 5.f</u> The city shall enforce measures established elsewhere in this element to minimize existing and potential future impacts upon San Elijo Lagoon and other important marine ecosystems.

Objective 6.0

Prevent the loss of important historical, archaeological, and paleontological resources.

<u>Policy 6.a</u> The city shall complete an inventory of local historic resources and cultural landmarks and shall establish a list of significant resources to be preserved.

<u>Policy 6.b</u> The city shall require that sites proposed for future development are to be evaluated by certified archaeologists and/or paleontologists in accordance with the California Environmental Quality Act. Where potentially significant adverse impacts are identified, the city shall require appropriate mitigation measures such as in situ preservation or professional retrieval.

<u>Policy 6.c</u> The city shall implement the objectives and policies established in the community design element of the general plan which promote the preservation of historic landmarks, focal points, and special features.

<u>Policy 6.d</u> The city shall encourage and support the acquisition of significant cultural resources by private and/or public entities interested in preserving such resources.

<u>Policy 6.e</u> The city shall establish a historic preservation section within its zoning ordinance.

Objective 7.0

Reduce the city's demands upon conventional, non-renewable sources of energy.

<u>Policy 7.a</u> The city shall require new developments to incorporate energy conservation measures and promote alternative energy systems.

GOAL 3.2

TO PROTECT AND ENHANCE SENSITIVE OPEN SPACE AREAS AND VIEWSHEDS

Objective 1.0

Preserve existing open spaces at appropriate locations throughout the city.

<u>Policy 1.a</u> The city shall restrict development along the bluffs overlooking Solana Beach and other areas such as the Atchison Topeka and Santa Fe railroad right-of-way to those uses which retain the open space character of these areas (eg., parks, open space spines, trails, etc.) in accordance with the open space plan.

<u>Policy 1.b</u> The city shall ensure the preservation of existing public beaches, parks, trails, open space areas, and golf courses pursuant to the adopted land use element of this general plan.

<u>Policy 1.c</u> The city shall implement the objectives and policies established in the community design element of the general plan which promote the preservation and enhancement of open space features.

Objective 2.0

Preserve the city's hillside areas and natural landforms in their present state to the greatest extent possible.

Policy 2.a The city shall enact a hillside development ordinance which contains development standards to: 1) maintain the natural visual character of the hillsides to the maximum feasible extent, 2) integrate architecture and landscaping into the hillside setting, 3) preserve significant visual and environmental elements, 4) minimize grading impacts, 5) restrict development on slopes of greater than 25 percent, 6) preserve prominent ridgelines, 7) require the contouring of manufactured slopes to blend with natural slopes, 8) encourage the use of innovative structural designs which adapt to the natural topography, 9) discourage "stair-stepping" of building pads, 10) require the blending of colors and materials with the hillside environment, and 11) provide for the planting of slopes with fire-retardant, drought-tolerant materials.

Objective 3.0

Maintain the quality of scenic views in the city as well as the overall visual quality of the city's landscape.

<u>Policy 3.a</u> The city shall require new developments to be subjected to visual impact analyses where potential impacts upon sensitive locations are identified.

<u>Policy 3.b</u> The city shall require that new structures and improvements be integrated with the surrounding environment to the greatest possible extent.

<u>Policy 3.c</u> The city shall enforce its adopted design guidelines as specified in the community design element of this general plan.

<u>Policy 3.d</u> The city shall encourage the preservation of private views, including policies for tree trimming and removal.

<u>Policy 3.e</u> The city shall designate areas that will be subject to a dark sky policy.

GOAL 3.3

TO MEET THE NEEDS OF THE ENTIRE COMMUNITY BY PROVIDING AN ADEQUATE LEVEL OF PARKS AND RECREATIONAL OPPORTUNITIES.

Objective 1.0

Provide a minimum of 3 acres of public park and recreational facilities for every 1,000 residents.

<u>Policy 1.a</u> The city park land required shall be a combination of beaches, playlots, regional parks, neighborhood parks, community parks, and joint use of public school recreational areas.

<u>Policy 1.b</u> The city shall establish parks throughout the city. Such parks may include appropriate facilities such as tot lots, active play areas, passive open space areas, picnic facilities, and sports fields.

<u>Policy 1.c</u> The city shall evaluate the potential to purchase publicly owned land when it becomes available.

Objective 2.0

Establish a master plan of hiking/jogging, bicycle, and equestrian trails.

<u>Policy 2.a</u> The city shall adopt a master plan of trails and shall develop at least one mile of trails annually until completion of the planned system. This trail system shall link the city's greenbelts, parks, and open space to the greatest extent possible.

Objective 3.0

Establish a park funding program to ensure that the costs of acquiring, improving, and maintaining city recreational facilities are consistent with the ability of residents to pay.

<u>Policy 3.a</u> The city shall adopt a park funding program by based on general revenue funds, user fees, state and federal grants, and developer contributions of land, facilities, and in lieu fees.

<u>Policy 3.b</u> The city shall require developers of residential land to dedicate land or fees for parks to ensure the continued provision of at least 3 acres of park land for every 1,000 residents.

4.0 THE CONSERVATION AND OPEN SPACE PLAN

As discussed in Section 2.0 of this conservation and open space element, a wide variety of natural resources, cultural resources, and open space areas are subject to the effects of urban development. To ensure that these issues receive proper consideration, the implementation of the policies established in this conservation and open space element is primarily the responsibility of the city Planning Department. Through its site plan review process, the Planning Department takes into consideration the compatibility of proposed development activities with natural resources, cultural resources, and open space areas.

The Planning Department is responsible for ensuring that proposed general plan amendments and land development proposals are processed pursuant to the California Environmental Quality Act (CEQA). In keeping with this responsibility, the Planning Department is able to identify potential adverse effects associated with proposed actions as related to natural resources, cultural resources, and open space. Potential adverse effects that are deemed significant should be either avoided or mitigated unless a statement of overriding considerations is adopted by the city.

As the ultimate authority in Solana Beach regarding land use policies, the City Council is responsible for approving or denying proposed general plan amendments and development proposals. The City Council has a related responsibility to certify that CEQA has been complied with adequately and, if necessary, to adopt statements of overriding considerations specifying why any significant impacts to natural resources, cultural resources, or open space are outweighed by other public interests.

5.0 GLOSSARY

Coastal Bluff: Any bluff where the toe of slope is now, or within the past 200 years has been, subject to marine erosion.

Conservation: The management of natural resources to prevent waste, destruction, or neglect.

Erosion: The process by which soil and rock are detached and moved by running water, wind, ice, and gravity.

Lagoon: An area of shallow salt water separated from the sea by sand dunes.

Non-Renewable Natural Resources: Inanimate resources that do not increase significantly with time and whose use diminishes the total stock (eg., minerals, fossil fuels and fossil water).

Renewable Natural Resources: Resources that can be replaced by natural ecological cycles or sound management practices (eg., forests and plants).

Watershed: The total area above a given point on a watercourse that contributes water to the flow of the watercourse; the entire region drained by a watercourse.

Wetlands: Areas that are permanently wet or periodically covered with shallow water, such as saltwater and freshwater marshes, open or closed brackish marshes, swamps, mud flats, and fens.

Economic Development Element



City of Solana Beach General Plan Program

Phillips Brandt Reddick



SOLANA BEACH GENERAL PLAN ECONOMIC DEVELOPMENT ELEMENT

CITY OF SOLANA BEACH 380 Stevens Avenue, Suite 120° Solana Beach, California 92075 (619) 755-2998

Solana Beach City Council

Margaret Schlesinger, Mayor
Jack Moore, Deputy Mayor
Marion Dodson, Council Member
Richard Hendlin, Council Member
Celine Olson, Council Member

Adopted November 14, 1988

TABLE OF CONTENTS

		Page	Number
1.0	INTRODUCTION		1
	1.1 Overview		1
	1.2 Purpose		1
	1.3 Legislative Authority		1
	1.4 Relationship to Other Elements of the Genera	1	
	Plan		2
	1.5 Plan Period		2
	1.6 Technical Appendix		2
2.0	EXISTING CONDITIONS/ISSUE ANALYSIS		2
	2.1 Economic Base		2
	2.2 Land Use		3
	2.3 Residential Community		3
	2.4 City Population		4
	2.5 Market Areas		4
	2.6 Commercial and Industrial Community		5
	2.7 Commercial/Industrial Employment Base		5
	2.8 Fiscal Impacts		6
	2.9 City Roles in Economic Development		7
3.0	GOALS. OBJECTIVES AND POLICIES		9

SOLANA BEACH GENERAL PLAN

ECONOMIC DEVELOPMENT ELEMENT

1.0 INTRODUCTION

1.1 Overview

The past few years have seen a growing awareness by City leaders and officials throughout California that every City governmental action and policy concerning physical development has an effect on the local economy. As a result, cities which are concerned about developing a tax base with which to support vital services, stimulating quality local development activity, promoting the quality of life in the community generally, and providing employment opportunities for local residents are moving to adopt policies and effect changes which will lead to positive results in these areas.

Such awareness has given rise to public/private partnerships, where local government and private sector developers and property owners cooperate in achieving mutually satisfactory developments in the community. The starting point in any such cooperation is the planning process. By incorporating economic considerations into the General Plan, the City formally recognizes the importance of economic development and lays the groundwork for future cooperation between the City and the private sector in developing and maintaining an economically healthy community. Moreover, the Economic Development Element functions as a yardstick by which to evaluate the economic implications of land use, circulation, and housing decisions made by the City Council as actual development activities are proposed by the private sector.

1.2 Purpose

The Economic Development Element is provided as an optional element of the Solana Beach General Plan. Its purpose is to set forth general guidelines for the development and maintenance of a sound economic base in the community, recognizing that the achievement of a sound economic base is interdependent upon related policies and objectives identified in the various elements of the Solana Beach General Plan.

1.3 Legislative Authority

The preparation of an Economic Development Element to a General Plan is authorized by Section 65303 of the government code of the State of California. This section states: "The General Plan may include any other elements or address any other subjects which in the judgement of the legislative body relate to the physical development of the County or City."

1.4 Relationship to Other Elements of the General Plan

Inclusion of an Economic Development Element in a general plan underscores the interplay between the Land Use Element, Circulation Element, and Housing Element, the policies and objectives of which are major considerations in the development of a sound economic base in the community. Further, the Economic Development Element identifies appropriate City roles to stimulate beneficial economic development.

1.5 Plan Period

The policies and objectives set forth in this Economic Development Element are based upon local and regional economic trends and determination of opportunities and constraints relevant to the City of Solana Beach identifiable as of 1988. Because of external influences and unforeseen events, the continuation of current trends, opportunities, and constraints cannot be assured. As a result, the policies and objectives identified in the Solana Beach Economic Development Element should be reviewed and modified as needed at least every ten years, and more frequently if significant problems with or obstacles to the achievement Element objectives are encountered.

1.6 Technical Appendix

To simplify the content and format of this Economic Development Element, presentation of detailed statistical information utilized in formulating the Element has been intentionally limited. Statistical data are presented herein only to the extent necessary to provide an overview of economic information upon the Element is based. Two reports have been prepared, containing detailed statistical information and comprehensive analyses upon which development of this Element is based:

- o Market Factors--Solana Beach General Plan; November 4, 1987.
- o Fiscal Impact Analysis -- City of Solana Beach, November 4, 1987.

These reports are available for review at the City Hall. They are identified as Technical Appendix A and Technical Appendix B respectively, which by this reference are made a part of the Solana Beach General Plan documentation.

2.0 EXISTING CONDITIONS/ISSUES ANALYSIS

2.1 Economic Base

As a suburban community, Solana Beach's economic base is keyed primarily to the economy of the Greater San Diego region. In particular, the City's residential and industrial facilities are sustained primarily by the Greater San Diego economic base. Its local-serving commercial facilities are keyed to this regional economic base as well. However, significant portion of the City's commercial base is supported by several local economic generators:

- o Del Mar Fairgrounds.
- o Beach tourism.
- o Floriculture in the City and nearby.

However, these are relatively minor in relation to the City's total economic base. This analysis is keyed in large measure to the regional economy. However, special consideration has been given to commercial potentials arising from beach and fairgrounds proximity.

2.2 Land Use

The City of Solana Beach contains 2,211.5 acres. The General Plan specifies that at time of full development the City's urbanized land use will be primarily residential and commercial, as indicated by the following tabulation:

		% Of Total
	# Acres	Acres
Residential	1,276.50	57.72
Commercial	150.40	6.80
Office/Professional	22.40	1.01
Light Industry	13.10	0.59
Public/Inst.	79.30	3.59
Sub-Total	1,541.70	69.71
Open Space/Rec	231.14	10.45
Vacant		
Roads	337.39	15.26
Rights of Way (I-5/Railroad)	88.50	4.00
Agriculture	12.83	0.58
Total	2,211.56	100.00

During the general plan evaluation process, 17 potential development sites were identified within the City. This list is by no means all inclusive, but provides a tangible indication of the small amount of land to be developed within the City--about 2.2 per cent.

Of these 17 sites, 11 are situated on or very near Highway 101 and Cedros Avenue. For the most part, these sites reflect opportunities for higher intensification of older existing uses. These sites can be a major asset to the City, particularly with respect to attracting specialized high-dollar commercial development, including hotel development.

2.3 Residential Community

The General Plan will allow the following residential uses at full development:

	# Acres	# Units	% Of Total Units
Estate (0-2 DU/Ac)	280.5	280	4.28*
Low Density (3 DU/Ac)	253.2	760	11.63
Low/Medium Density (4 DU/Ac)	375.5	1,502	22.98
Medium Density (5-7 DU/Ac)	147.0	882	13.49
Med-High Density (8-12 DU/Ac)	80.5	805	12.32
High Density (13-20 DU/Ac)	139.8	2,307	_35.30
Total	1,276.5	6,536	100.00

The prospective 6,536 residential units at full buildout reflect a 4.7% increase over current levels, which are estimated at 6,245 units. Essentially, Solana Beach will remain primarily a detached single-family community, with over half of its units of this type. Basically, the residential community is largely built out at this point in time. The only significant new development of residential units will be of a multiple-unit type, primarily in several vacant parcels and to a lesser extent in replacement parcels.

2.4 City Population

As noted earlier, at full build out the general plan will accommodate an estimated 6,536 residential units per year. Residential in turn will accommodate an estimated population of 16,897, computed as follows:

	# Units	Population Per Unit	Population
Single-Family Multiple-Family	3,424 3,112	2.89 2.25	9 ,895 7 ,002
Mobile Homes Total	6,536	2.00	16,897

The above projections are predicated upon current per unit population densities, as identified in the market report. They assume that all additional residential growth will be of a multiple-family type, and that all existing mobile-home uses will be replaced.

2.5 Market Areas

The market analysis utilized in preparing the Economic Development Element identified economic growth potentials in four principal areas, ranging from a localized 2.5-mile ring to the County region as a whole. Projected population growth levels for these four defined market areas are as follows:

* Midpoint of density range used for calculating residential units.

			%
	1987	2002	Increase
2.5-Mile Ring	28,000	35,000	25.0%
5.0-Mile Ring	84,000	143,000	70.2
10.0-Mile Ring	225,000	390,000	73.3
San Diego County	2,188,000	2,747,000	25.5

As indicated, the immediate local market area has projected growth approximately equal to that of the region as a whole. However, the surrounding 5.0-mile and 10.0-mile rings have projected growth substantially in excess of that of the region. These two market areas are of significant importance to many of the City's commercial establishments.

2.6 Commercial and Industrial Community

Full buildout of the general plan will provide for approximately 2.5 million square feet of commercial building space in the City, as follows:

	Acres	# SF
General Commercial	114.76	1,262,360
Light Commercial	1.90	20,900
Special Commercial	33.70	505,500
Office/Professional	22.40	448,000
Light Industrial	13.10	248,900
Total	185.86	2,485,660

This amount of space will represent approximately 3.25 times the existing building space, estimated at 764,000 square feet.

A major potential for new commercial development is hotel/motel usage. Much of this usage would likely be located in parcels currently designated for commercial usage, located primarily along Highway 101. The market analysis indicates the capability for development for up to four to six new high-quality hotel complexes, in the range of 600 to 800 units.

Light industrial usage is and will continue to be a relatively minor land use factor in the City. At full build out, the General Plan allows for 13.1 acres of such usage, which is projected to accommodate approximately 249,000 square feet of building space.

2.7 Commercial/Industrial Employment Base

Based upon Southern California averages, the City's commercial/industrial building space allowed by the General Plan at full buildout will accommodate an estimated 7,600 employees.

2.8 Fiscal Impacts

A fiscal model has been created to evaluate the fiscal impacts of future residential and commercial development upon the City's finances. This model demonstrates that the City can be comfortable in knowing that long-term implementation of the General Plan will result in positive fiscal impacts. To illustrate, future residential development will "pay its way" under existing service levels. This is indicated by fiscal model estimates of five prototypical residential types at anticipated housing value levels, which estimate the following estimated annual surplus generated by one acre of residential development:

				One-Time
			Net	Devel
			Annual	Control
		# Units	Cash Flow	Fees
\$ 75,000	Apartment	30	\$ 87	\$ 11,250
150,000	Condominium	18	1,661	13,500
225,000	Condominium	18	4,331	20,250
250,000	Single-Family	5	882	6,250
350,000	Single-Family	3	1,084	5,250

The model also indicates that the City's principal opportunity for creation of substantial additional surplus revenues lies in commercial development. This is illustrated by the following estimates of annual surplus (to the City of Solana Beach) generated by one acre each of eight types of prototypical commercial development:

	_ # SF	Net Annual Cash Flow	One-Time Devel Control Fees
Retail			
\$100/SF Taxable Sales	11,000	\$ 12,010	\$ 6,600
150/SF Taxable Sales	11,000	18,514	7,700
200/SF Taxable Sales	11,000	25,018	8,800
Restaurant			
250/SF Taxable Sales	7,000	19,729	5,600
300/SF Taxable Sales	7,000	24,080	7,000
Hotel (50 Rooms)	22,500	84,344	17,500
, , , , , , , , , , , , , , , , , , , ,		·	•
3-Floor Garden Office	20,000	772	16,000
Light Industry	18,000	4,522	5,400

The above projection results point with favor to the City's future financial health. None of the prototypical developments indicate a negative cash flow-including residential—and commercial development has a highly favorable cash

flow. Prospective new commercial development can add significantly to the City's fiscal resources, estimated at approximately \$2.6 million annually as follows:

	# Acres	Annual Surplus Per Acre	Annual Surplus
Hotel Other Commercial Total	10 90 100	\$84,000 20,500	\$ 840,000 \(\frac{1,800,000}{2,640,000}\)

From a planning standpoint a principal point to be drawn from fiscal analysis is that fiscal considerations should not be a major negative factor in judging the desirability of any particular type of development. This means that the City and its residents have the choice to select the types of developments they want, based upon a variety of non-fiscal factors as well as financial considerations. In particular, this fiscal situation means that the City should be able to dictate that all new development in the City meet the highest quality standards. The City should not be forced to accept less than the highest quality development because of fiscal considerations.

On the other hand, the above projections indicate that one form of commercial development has a particularly high level of cash flow return to the City. This is hotel development, which yields a projected favorable annual cash flow (in 1988 constant dollars) of about \$85,000 per acre--more than triple the levels returned by retail and restaurant uses. Thus, selective hotel development which can meet other community criteria can be a a major benefit to the City's future finances.

The above tabulations also indicate that one-time development control fees should be in the range of \$5,250 to \$20,250 per acre. The fiscal model assumes that such fees are offset by direct development control costs.

2.9 City Roles in Economic Development

The realization of General Plan objectives will not be automatic. Rather, the City will need to take a pro-active stance, working as a partner with the private sector in implementing these objectives. Realization of General Plan objectives will require future City participation. Key areas of City partnership participation should include the following:

- o Maintenance of commercial development opportunities, through strong ongoing restriction of commercially designated sites for high quality future commercial use only.
- o Encouragement of an optimum amount of hotel facilities within the City, with particular emphasis in the upgrading of Highway 101 sites, consistent with development controls.
- o Encouragement of deeper-lot commercial development--with its attendant better site planning opportunities--on the City's principal commercial arterials, with particular emphasis on Highway 101 and Cedros Avenue.

- o Assistance in related site assembly, including utilization of redevelopment procedures allowable under California law.
- o Provision of financial assistance to obtain public facilities and private improvement, through utilization of such implementation means as: (1) California Redevelopment procedures, (2) special assessment district procedures, and (3) allocation of gas taxes and other available City funding.
- o Assistance to the Solana Beach business community in planning and promoting a most viable commercial sector.

Section 3.0 of this Economic Development Element sets forth goals, objectives, and policies which establish the general course for City action to implement its General Plan.

3.0 GOALS, OBJECTIVES, AND POLICIES

GOAL 3.1

TO PROVIDE FOR THE LONG-TERM ECONOMIC HEALTH OF SOLANA BEACH THROUGH DEVELOPMENT OF AN EXPANDED COMMERCIAL BASE

Objective 1.0

Encourage greater visitor-serving (including regional-serving) commercial facilities, particularly hotel, restaurant, and retail facilities.

Policy 1.a The City shall provide for the development of visitor-serving commercial uses during the next 20 years within appropriate areas of the City.

Objective 2.0

Encourage greater retail, office, and other commercial facilities to serve local resident needs.

<u>Policy 2.a</u> The City shall provide for the development of local-serving commercial uses during the next 20 years within appropriate areas of the City.

Objective 3.0

Support organizational efforts to maintain and/or increase commercial volume and quality.

<u>Policy 3.a</u> The City shall encourage the strengthening of existing and prospective marketing organizations within Solana Beach through financial and administrative assistance.

<u>Policy 3.b</u> The City shall support private marketing efforts aimed at increasing commercial volume by providing relevant land use and demographic information to marketing organizations.

GOAL 3.2

TO PROMOTE THE CITY'S ECONOMIC HEALTH BY UPGRADING ITS COMMERCIAL BASE.

Objective 1.0

Adopt a regulatory program aimed at securing only highest-quality new development.

<u>Policy 1.a</u> The City shall establish land use controls to insure high-quality-yet practical--levels of new development, encompassing such items as site planning, setbacks, screening, and noise control.

Objective 2.0

Ensure adequate access to accommodate existing and future levels of commercial visitors and employees, through the Circulation Element of the Solana Beach General Plan.

<u>Policy 2.a</u> The City shall ensure the provision of adequate parking facilities to serve new commercial development.

<u>Policy 2.b</u> The City shall implement circulation improvements as necessary pursuant to the Circulation Element of the General Plan, to improve automobile access to the City's principal commercial areas.

<u>Policy 2.c</u> The City shall implement the provisions of the Circulation Element to improve—where possible—the pedestrian—oriented environment within the City's key visitor—serving and other commercial areas.

Objective 3.0

Identify the potential for establishing measures to revitalize the area along the Highway 101 corridor and Cedros Avenue, including the possible formation of a redevelopment area.

<u>Policy 1.a</u> The City shall complete a feasibility study which evaluates the effectiveness of potential revitalization measures for the area along Highway 101 and along Cedros Avenue.

GOAL 3.3

TO ASSURE CONTINUED DELIVERY OF ADEQUATE PUBLIC SERVICES AND FACILITIES TO CITY RESIDENTS AND ORGANIZATIONS, WITHIN THE LIMITS POSED BY FISCAL RESOURCES.

Objective 1.0

Establish procedures and mechanisms to encourage and give priority to commercial uses providing greatest financial resources to the City.

<u>Policy 1.a</u> The City shall give greatest priority and emphasis in terms of economic development to hotel, restaurant, retail, and office uses, in that order.

<u>Policy 1.b</u> The City shall give least emphasis in terms of economic development to residential and industrial development.

Objective 2.0

Establish procedures for the continued assessment of fiscal impacts of development.

Policy 2.a The City shall utilize its fiscal model through the establishment of

appropriate procedures for its use to evaluate the fiscal impacts of proposed developments and annexation.

<u>Policy 2.b</u> The City shall establish a development monitoring program to track development activities as they relate to the need for expanded public services and facilities.

<u>Policy 2.c</u> The City shall continue a developer fee structure for providing development services.

GENERAL PLAN INDEX

No.	<u>Item</u>	Elemen	t Page	Section
1.	Agriculture	L.U.	11	4.a.
2.	Archaeological Resources	OS&C	25	6.b.
3.	Condominium Conversion	L.U.	10	1.c.
4.	Condominium Conversion	н.	5-21	
5.	Dark Sky Policy	OS&C	28	3.e.
6.	Definitions, General	OS&C	31	-
7.	Definitions, General	N.	25-27	_
8.	Definitions, General	s.	34&35	_
9.	Density Calculations	L.U.	14-16	1.b
10.	Energy Conservation	OS&C	26	7.a.
11.	Erosion Control	OS&C	22	1.b.
12.	Erosion Control	s.	29	3.a.
13.	Flood Zones	s.	After 12	Ex. 1
14.	General Plan Amendment	OS&C	23	2.c.
15.	General Plan Amendment	Intro	10	4.3
16.	General Plan Amendment	L.U.	9	2.2.5
17.	General Plan Amendment Consideration	L.U.	13	2.a,1.a
18.	General Plan Amendment Consideration	н.	3-35	
19.	General Plan Update	L.U.	13	7.b. 20.
20.	Geotechnical Investigations	s.	28	1.a.
21.	Grading	L.U.	16	1.c.
22.	Hillside Development	OS&C	27	2.a.
23.	Historical Resources	OS&C	25	6.b.
24.	Housing, Density Bonus	н.	5-13	
25.	Housing Element Update	н.	1-1	
26.	Housing, Low Income	L.U.	16	V
27.	Housing, Low Income	н.	5-15	
28.	Housing, New	н.	4-6	
29.		L.U.	10	1.b.
30.	Housing, Rehabilitation	L.U.	10	1.b.
31.	Industrial	L.U.	11	3a,3b
32.		L.U.	18-20	_
33.	Land Use, Economically Preferred	E.	10	1a&1b
34.	Legal Lots	L.U.	16	IV
35.	Mobile Home Park Closure	H.	5-6	
36.	Noise Analysis, when required	N.	After 06	Ex. 8
37.	Noise Analysis, when required	N.	After 16	Ex. 12
38.	Noise Analysis, when required	N.	After 17	Ex. 14
39.	Noise Levels, Project Conditions	N.	After 17	Ex. 15
40.	Noise Levels, Project Conditions	N.	21	Actn.1
41.	Park Land Standard	s.	29	2.c.
42.	Park Land Standard	OS&C	29	1.0
43.	Park Land Standard	OS&C	28	1.9d
44.	Police Protection Levels	s.	31	1.a.
45.	Redevelopment	н.	5-15	

GENERAL PLAN INDEX Page No. 2

No.	<u>Item</u>	Elemen	t Page	Section
46.	Seawalls	S.	32	4.b.
47.	Sensitive Lands, Preservation	OS&C	24	5.Ъ.
48.	Sensitive Lands, Preservation	OS&C	25	5a.d.
49.	Slopes greater than 25 percent	L.U.	14	1.b.II
50.	Slopes greater than 25 percent	L.U.	16	1.c.
51.	Street Widening	С.	15	4.c.
52.	Street Classifications	C.	After 18	Ex. 4
53.	Street Classifications	C.	19&20	A11
54.	Traffic Controls	С.	After 04	Ex. 1
55.	Traffic Signals	С.	8	2.3
56.	Traffic Standards	С.	13	1.0
57.	Trees, preservation	OS&C	24	5.c.
58.	Views	OS&C	27	3.d.
59.	Views	L.U.	13	1.b.
60.	Views	L.U.	14	1.a.
61.	Visual Analysis	OS&C	27	3.a.
62.	Water Conservation in New Developments	OS&C	23	2.a.
63.	Xeriscape Landscaping	OS&C	23	2.a.
64.	Zone Changes	L.U.	9	2.2.5
65.	Zone Changes	L.U.	After 20	Tb1. 3

Legend of Elements:

- C. Circulation
- E. Economic Development
- H. Housing
- Int. Introduction
- L.U. Land Use
- N. Noise
- OS&C Open Space & Circulation

GENERAL PLAN AMENDMENT HISTORY

- 1. Original Adoption November 14, 1988
- 2. Resolution 91-92 (adopted 10-21-91) Clarifications added to Definitions of Light Commercial, Special Commercial and General Commercial allowing residential as a secondary use; also a typographical error was corrected on Objective 1., Policy 1.b.III.
- 3. Resolution 92-16 (adopted 4-6-92) Adoption of the new Housing Element.
- 4. Resolution 93-5 (adopted 1-19-93) General Plan Amendment Unanimous Vote Requirement Change.



U.C. BERKELEY LIBRARIES
C124907980

